

DUN'S REVIEW

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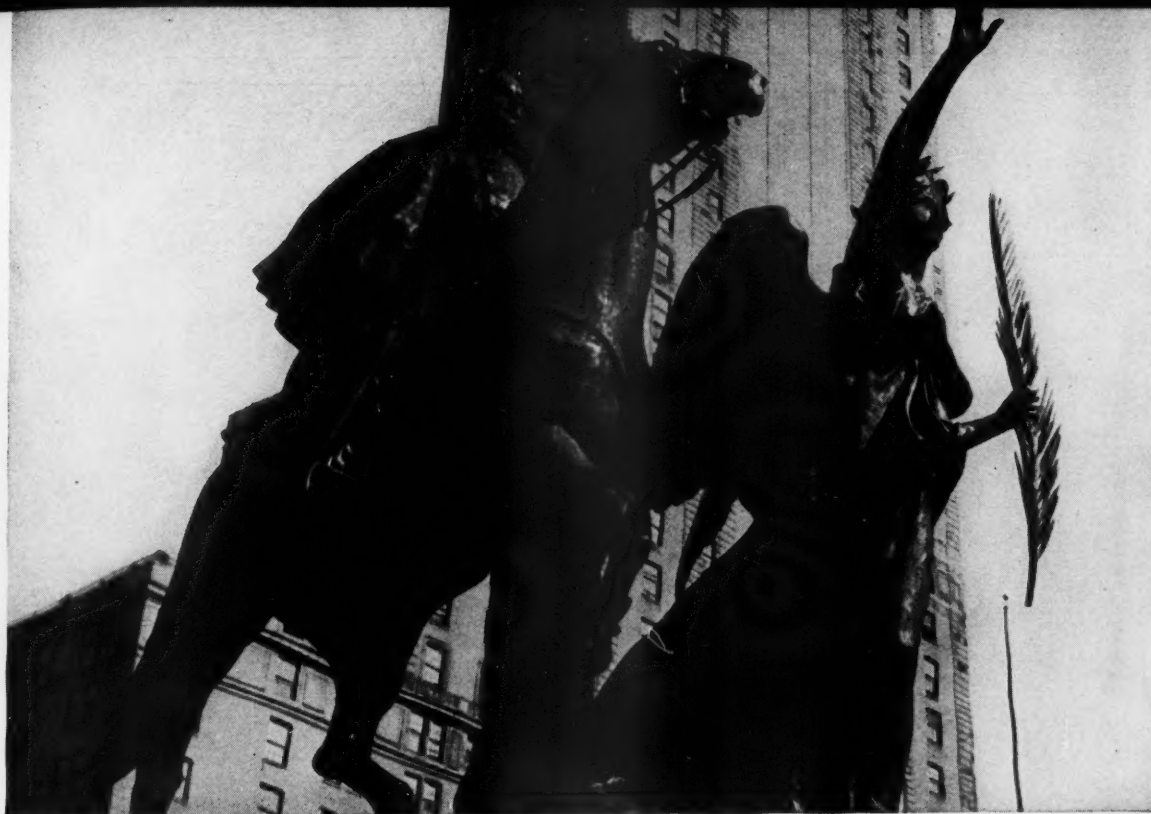
May 1941



This Month's Cover **SEATTLE, WASHINGTON**

In 1874 an artist named H. Eastman painted in water colors the view which appears on this month's cover of "Dun's Review." The Olympic Mountains are background; at front is the western slope of Renton Hill. Yesler Way runs diagonally from the left toward the waterfront, ending in the city's principal wharf, flanked by Yesler's Mill. At left of these is a square of buildings containing Dexter Horton's bank and, beyond, an L-shaped wharf called Harrington's dock. The picture is reproduced through courtesy of the Phelps Stokes collection, New York Public Library. . . .

Seattle became one of the nation's major cities after the Alaskan gold rush of 1897. From its founding date, 1852, to 1880, population had reached 3,533. Four years later the first railroad came and by 1890 population was 42,837. In 1896 Seattle began to capitalize on its position as nearest American city to the Orient and Alaska. . . . Seattle is bounded to east by Lake Washington, 27 miles of fresh water across whose waist floats a concrete pontoon bridge; to south by white-browed Mt. Rainier, extinct volcano and third highest U. S. peak. An eight-mile ship canal connects Puget Sound with Lake Washington by way of Union Lake. Seattle's 948 manufacturing establishments (1937 Census) include makers of lumber and timber products, prepared feeds, shipbuilding, steel, non-ferrous metal alloys; aircraft manufacturing is assuming importance. The 1,500 wholesalers in 1939 rang up \$451,292,000, 36.9 per cent above 1935. Seattle's 3,642 service establishments earned \$24,675,000; the 6,563 retailers had a \$208,537,000 volume, 28 per cent above 1935. Population is 366,847.



STATUE OF GENERAL WILLIAM TECUMSEH SHERMAN, FIFTH AVENUE, NEW YORK CITY—PHOTOGRAPH BY LAWRENCE D. THORNTON

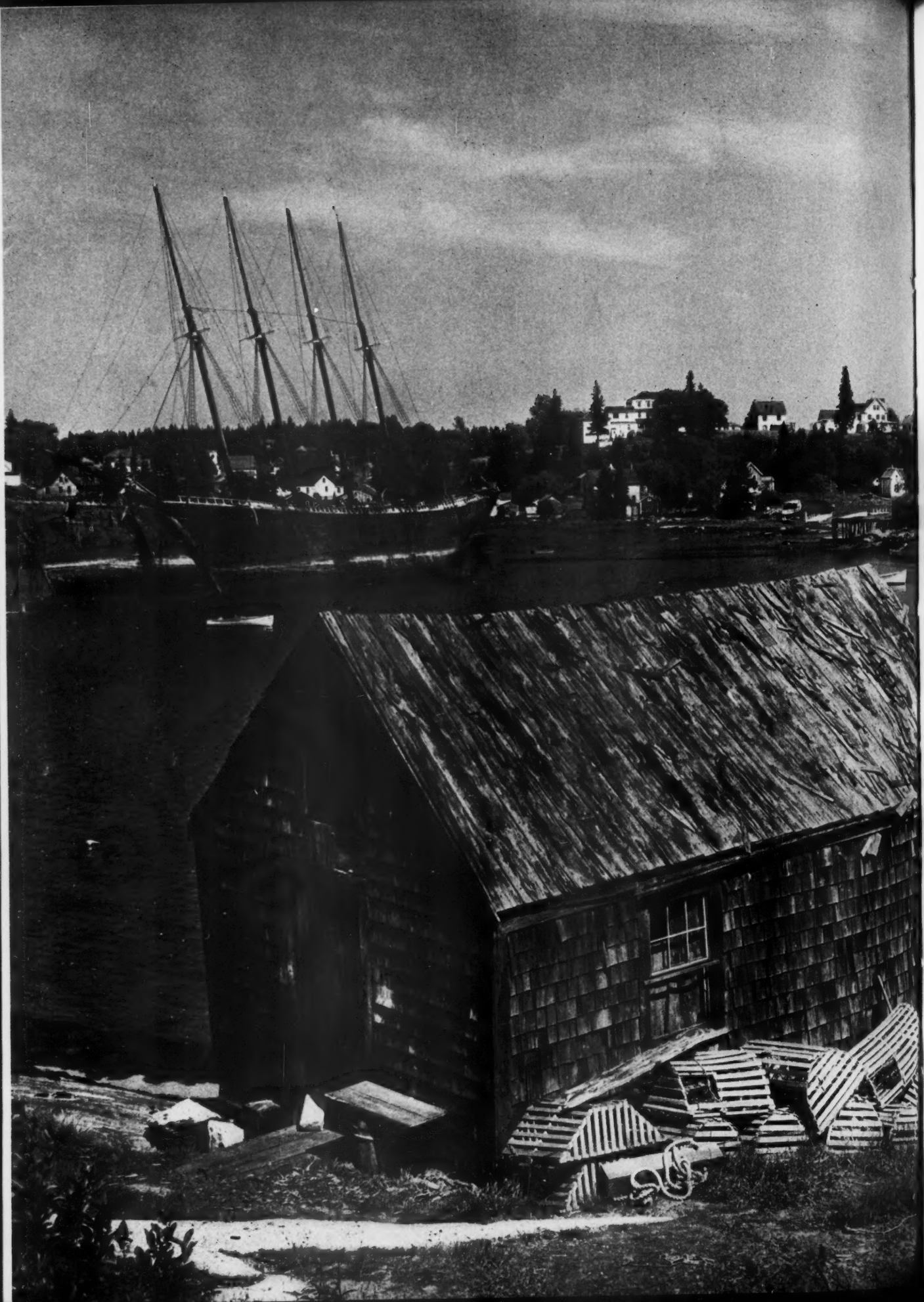
DUN'S REVIEW



May, 1941

Seattle, Washington - - - - -	Cover	The Trend of Business - - - - -	29
Booth Bay Harbor, Maine (Frontispiece) - - - - -	4	INDUSTRIAL PRODUCTION SUDDENLY CEASES ADVANCE; DEFENSE SPENDING PREDOMINANT.	
Subcontracting—One Problem in Defense Production - - - - -	5	Near-Record Spring Trade Volume - - - - -	33
GOVERNMENT AND INDUSTRY WORK TOGETHER TO BROADEN THE PRODUCTION BASE THROUGH SUBCONTRACTING		A SUMMARY OF MAJOR TRENDS IN RETAIL TRADE AS RECORDED BY THE REGIONAL TRADE BAROMETERS.	
PETER R. NEHEMKIS, JR., <i>Special Assistant, Defense Contract Service, OPM</i>		Significant Business Indicators - - - - -	36
1841—The Year of the Prophets - - - - -	13	Through the Statistician's Eyes - - - - -	37
PANORAMA OF EVENTS IN AND ABOUT THE YEAR THE MERCANTILE AGENCY WAS ESTABLISHED.		PRICES, FIVE COUNTRIES; ALASKA'S POPU- LATION; SIZES OF FAMILIES, FARM LABOR.	
A. M. SULLIVAN <i>Associate Editor, DUN'S REVIEW</i>		Analyzing the Record of Industrial and Commercial Failures - - - - -	39
Radio Is—As Radio Advertising Does - - - - -	21	Here and There in Business - - - - -	43
TRACING THE METEORIC RISE OF RADIO AS AN ADVER- TISING MEDIUM—ITS ADVANTAGES AND LIMITATIONS.		THINGS NEW, INTERESTING AND SIG- NIFICANT IN THE WORLD OF BUSINESS.	
GEORGE T. BRISTOL <i>Editorial Staff, DUN'S REVIEW</i>		The Business Bookshelf - - - - -	52
The Business Diary - - - - -	27	Over the Editor's Desk - - - - -	57
Regional Trade Barometers - - - - -	28, 30, 32, 34		
FOR USE IN CHECKING REGIONAL SALES AND QUOTAS, INDEXES FOR THE UNITED STATES AND 29 REGIONS.			

Information about subscription rates on page 57. . . . Second cover photograph by Laidlaw, courtesy
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ANTI-AIRCRAFT GUN—U. S. ARMY SIGNAL CORPS PHOTOGRAPH

SUBCONTRACTING— ONE PROBLEM *in* DEFENSE PRODUCTION

PETER R. NEHEMKIS, JR.

*Special Assistant, Defense Contract Service,
Office of Production Management*

IT has become an accepted pattern of our thinking to visualize war in terms of fleets of heavy bombers accompanied by tiers of speedy pursuit ships; waves of fast moving, light and heavy tanks; motorcycle reconnaissance units and armored scout cars; cavalry maneuvering on wheels; motorized infantry. The startling success of the German Panzer divisions in breaking through the French lines during the fateful month of May, 1940, has not been without profound effect on the thinking and planning of those

Stimulated by the needs of the defense program, there is being developed an amazing expansion of industrial plant capacity. This effort runs in various directions that all machine output may be used most both in large and small plants. Of especial interest to many is the effort to broaden the production base through subcontracting as has been done in other countries. Here a man busy in this work tells how this activity functions.

charged with the defense of our shores.

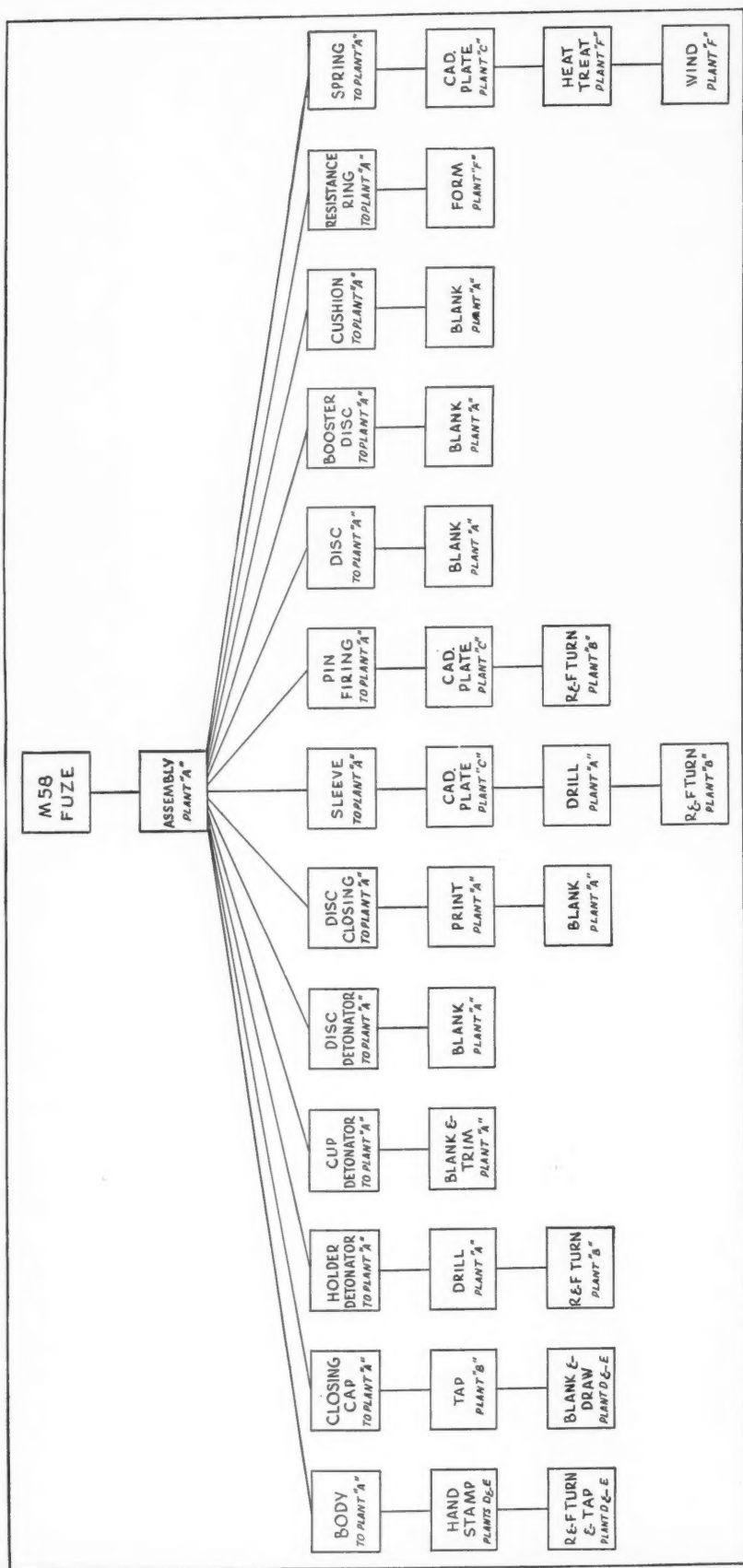
One fact remains crystal clear: the modern mechanized and motorized army is impotent unless it has adequately harnessed to it the workshops of a nation's industry. For behind the highly mechanized fighting equipment and material of the modern army lie the forges, the lathes, the drill presses, the

machine tools, the jigs, dies, and patterns; and the assembly lines of industrial production.

The technique of the war of movement requires not only a superb organization of fight-

ing men and material but also the highest degree of co-ordination between industry and the armed services. Indeed, the modern theater of war lies as much along the transmission belts of industry as it does in the actual areas of combat. Today, the fighting forces are but the cutting edge of a gigantic machine tool. As General

[5]



the final assembly is done in that plant, as shown above.

This sketch is, of course, only part of the careful planning that was done. There are specification sheets describing the work and sheets describing in detail the equipment available at each plant. The parts are routed as shown, often from one plant to another and then back to the first plant, that the machines available at each plant may be most advantageously used. Accompanying this sketch there is, too, a map showing the location of the six plants and showing the routes—with mileages and running times—so that transportation between the plants is carefully time-tabled. The

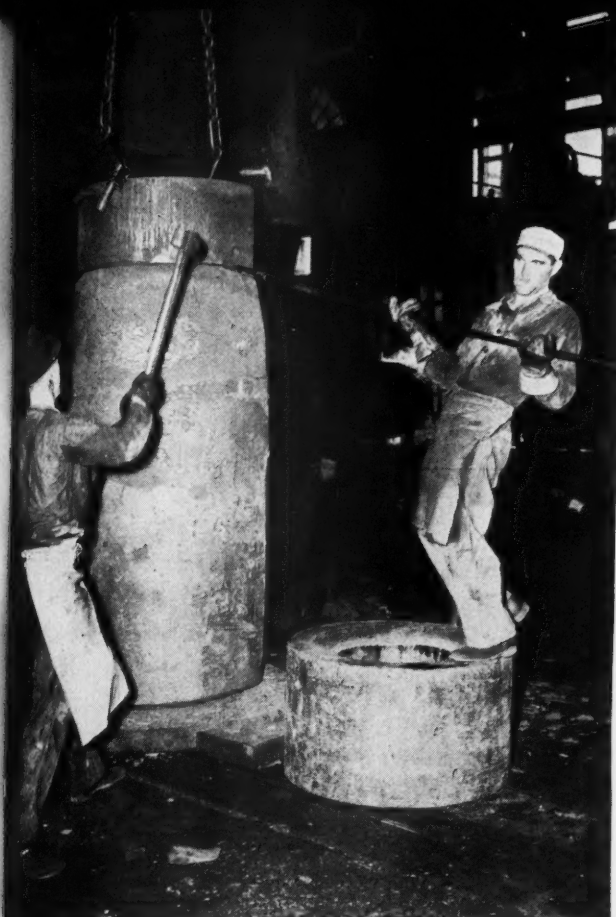
shortest run is one mile; the longest sixteen miles.

Such careful planning of possible arrangements for manufacture of a part obviously takes considerable time and effort. Such efforts would not be worthwhile unless there were possibilities of adding tremendously to what might be produced for defense needs. It has been estimated by a machine-tool dealer, whose organization regularly contacts 10,000 metal-working plants in all parts of the United States, that half of the machine tools in the country—excluding special-purpose equipment—are in small shops, employing, say not more than 50 or 100 persons.

A Subcontracting "Case"

This memorandum sketch, prepared in the Boston District office of the Defense Contract Service, to some extent shows what subcontracting involves. It has to do with a plan for making a small part, an "M58 Fuze," in six plants located in and around Springfield, Chicago, and Northampton, Mass.

There are 13 parts to this product with 35 operations to be performed on them before assembly. This was a proposed plan; it may not have been used in just this way. Plant "A" is the principal contractor and



FORGING PART OF A BIG NAVY GUN—PHOTOGRAPH BY PALMER, N.D.A.C.

H. K. Rutherford puts it, "The secret of success in warfare to date appears to depend upon perfecting the management of men and machines." In the final analysis, it is the extent to which a nation succeeds in the organization and mobilization of its economic resources which spells victory or defeat.

In the months before us, we shall encounter our most critical period: we are building the foundations for an armament production to provide this nation with the greatest military and naval force in the world; the nation's vast industrial plant is tooling up; the assembly lines are moving. We shall before long have erected on these shores the world's most formidable fortress for the preservation of our freedom. Can we move fast enough? Can we meet the totalitarian challenge of efficiency with our own kind of democratic efficiency without it being too late? Can we become an adequate arsenal to the democracies in the short space of time

more layers deep into the industrial processes.

Now subcontracting is no novelty to the American industrial scene. In good times, many concerns were wont to let out work which their own facilities were not equipped to handle. In bad times, these same shops were glad to avail themselves of the opportunity of taking on some extra work from other prime contractors in order to keep their men and machines busy; they became subcontractors.

Throughout the New England area there are countless small manufacturers who make no product of their own, but whose sole productive activity is given over to work which has been "shopped out" by larger manufacturers. Similarly, in the Cleveland-Detroit area—as well as other large manufacturing centers—there are innumerable small shops which have for many years specialized in "jobbing," an old term for subcontracting or farming-out.

which is available to us? Or must history record of us: "Too late and too little?" Such is the paramount test which our American democracy faces.

The present gigantic requirements of our defense program, together with our existing and future commitments under the Lend-Lease Act, require that we undertake another approach to the problem of speeding up production. Use of our existing plant is rapidly reaching capacity. This leaves us with no alternative but the utilization of a widespread system of subcontracting—subcontracting which will spread five, six, and

The classic example of subcontracting is, of course, the automotive industry. Here, we find plants—small, medium, and large—situated in every part of the country, feeding South Bend, Flint, Detroit, and other motor centers with a steady stream of parts ranging from clutch springs to crankshafts and from grinding wheels to headlamp sockets. A score of industries help keep the assembly lines of the automotive industry moving.

It Isn't New

There are, therefore, in virtually every part of the country prime contractors and subcontractors who have had many years of experience with the processes of farming out. Nor should the practice of subcontracting be regarded as a business relationship in which the subcontractor is always the smaller of the business units. On the contrary, the largest establishments may frequently become subcontractors. Thus, the Westinghouse Electric Co. is presently a subcontractor for the Kearney-Trecker Co., manufacturers of milling machines. Similarly, a subsidiary of Johnson & Johnson, the well-known manufacturers of surgical goods, is a subcontractor engaged in turning out aviation components for various aircraft companies.

But the defense effort has presented new and serious production problems. For one thing, there is a serious shortage of available management capable of supplying the essential directional and technical effort required of a successful system of subcontracting. For another, the type of work which many concerns are being asked to subcontract is entirely new. While the forge, machinery, and stamp equipment of a particular plant may lend itself to the manufacture of shell casings, or fuses or percussion caps, the company—management and workers—may be totally lacking in experience in that specialized type of munitions production.

Before a prime contractor can farm out or subcontract an order, he must know with certainty that the particular

DEFENSE CONTRACT SERVICE ORGANIZATION

To FACILITATE the use of all man power, space, and machine capacity of this country, there is, in the OPM Division of Production, the Defense Contract Service, headed by Robert L. Mehornay, president, North Mehornay Company, Kansas City, Mo.

The DCS informs all businesses, especially the smaller establishments, as to the needs of the Armed Services and as to procurement procedures, bidding

practices, financing of contractors, and so on. It develops a wider use of subcontracting and renders such special services as will effectuate the purposes of OPM.

To carry on these activities the Service is organized with five sections and with decentralized offices. The five sections are located in the new Social Security Building, Washington, D. C. They are further divided into units.

FINANCIAL PROCEDURE	CHARLES S. GARLAND, Financial Consultant JOHN G. MCCOY, Financial Consultant WEBB W. TRIMBLE, Assistant Financial Consultant
BUSINESS PROCEDURE	C. J. MYERS, Business Consultant PAUL C. GERHART, JR., Associate Business Consultant
SUBCONTRACTING PROCEDURE	FRANCIS J. TRECKER, Subcontracting Consultant JOSEPH L. TRECKER, Subcontracting Consultant
CONTRACT PROVISIONS	JOSEPH P. COTTON, JR., Contract Consultant
SPECIAL SERVICES	PETER R. NEHEMKIS, JR., Consultant on Special Services

There are also the following co-operating agencies: Federal Reserve System (Agency); Federal Reserve Banks, Branches, and Clearing Houses (Field Operations); Technical and Civilian Advisors; Army Advisors; Navy Advisors.

In each of the 36 Federal Reserve Banks and Branch Banks, there is a representative of the Federal Reserve System available for consultation especially upon mat-

ters of financing and lending policies under defense conditions.

Beside this co-operative activity of the Federal Reserve System, there are district offices of the Defense Contract Service with District Co-ordinators and District Managers.

Each of the following such offices is located in the Federal Reserve Bank Building of the city named.

<i>City</i>	<i>District Co-ordinator</i>	<i>District Manager</i>
BOSTON, MASS.	ALBERT M. CREIGHTON	HENRY S. BEAL
PHILADELPHIA, PA.	DR. THOMAS S. GATES	FREDERICK W. HANKINS
CLEVELAND, OHIO	GEORGE C. BRAINARD	HERMAN H. LIND
RICHMOND, VA.	JACK G. HOLTZCLAW	
ATLANTA, GA.	FRANK H. NEELY	W. C. CRAM, JR.
CHICAGO, ILL.	W. HOMER HARTZ	THOMAS S. McEWAN
DETROIT, MICH.	CLARENCE W. AVERY	WARREN H. CLARKE
ST. LOUIS, MO.	HARRY B. WALLACE	FRANK J. McDEVITT
MINNEAPOLIS, MINN.	ROGER B. SHEPARD	
KANSAS CITY, MO.	KENNETH A. SPENCER	R. W. WEBB
DALLAS, TEX.	CHARLES R. MOORE	A. J. LANGFORD
SAN FRANCISCO, CAL.	R. C. FORCE	

type of work will produce acceptable parts in volume and on delivery dates specified; otherwise the whole assembly is thrown out of gear. The prime contractor must not only satisfy himself on what work he proposes to farm out, but to whom he shall farm it out. Determination of this question is not merely one of ascertaining the availability of lathes, grinders, presses, and so forth: it is primarily a question of the responsibility of the management, the size of the tools, their speeds, and the tolerances to which they will work. For example, aircraft engine makers regard only a relatively few shops as suitable for subcontracting work. Frequently, it may take months of "educational" work to develop those who are ultimately selected.

Training; Inspection

Often an excellent potential subcontractor may be lacking one or two essential tools which must be procured before operations can be undertaken. In other instances, it may be necessary for the prime contractor to train the men in the subcontractor's shop in the precise methods required to meet the particular specifications; he may even be required to have his own engineers in the subcontractor's shop to break in the operation and to keep his technicians and mechanics on the job so that the desired quantities and qualities are maintained. An inspection service will generally have to be provided.

The prime contractor must also be prepared to cope with the management problems of his subcontractors: planning, supervision, routing of materials, production methods, shop lay-out, cost estimates, deliveries. In this connection, the prime contractor can effectively "educate" his subcontractors by encouraging them to visit his own plant and there see the flow of production as it functions under the prime contractor's direction.

Nor should it be overlooked that subcontracting possesses distinctive business advantages—advantages to the prime contractor as well as to the sub-

contractor. For the prime contractor, farming out is the most effective device for relieving a choke-point and providing a way for speedily rounding out a full volume production program. It enables both the prime contractor and subcontractor (who in turn can farm out) to take on an additional volume of work on the basis of their existing equipment: it takes time to build a new plant or even an addition to an existing plant, and new machinery is not readily available. Moreover, in certain lines, the smaller shops may have even better equipment, greater experience, and lower shop costs than the larger establishment. Finally, farming-out relieves the prime contractor of the need for an additional capital investment for new equipment or plant construction, since in effect he is "borrowing" the capital and equipment of the subcontractor.

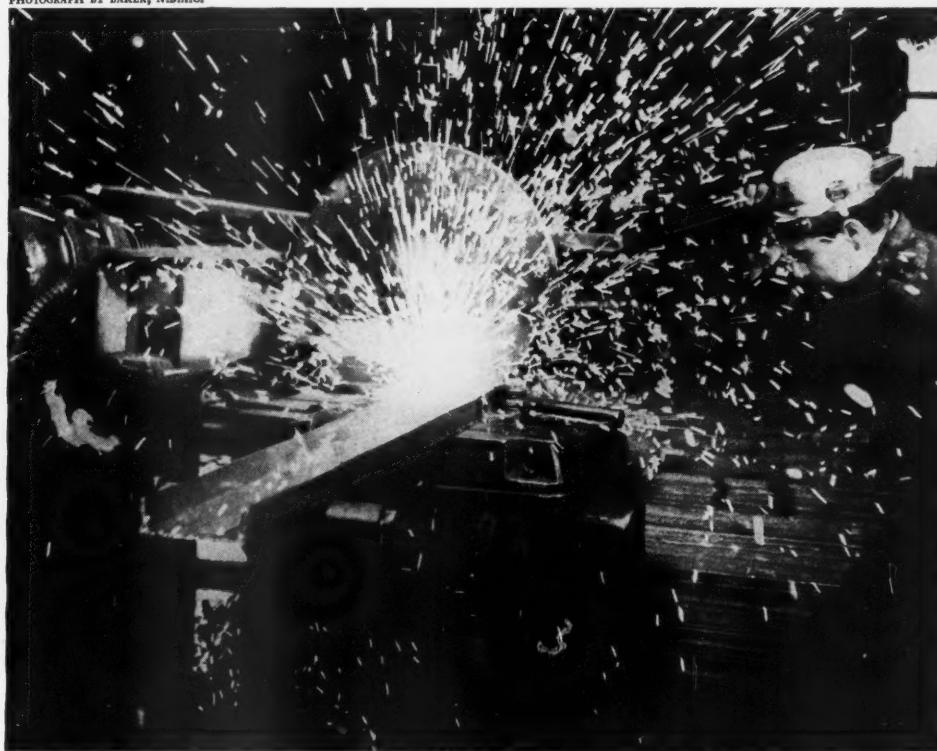
The shipbuilding industry has been quick to see the advantages of farming-out. Some yards are being used almost exclusively for final assembly. One well-known optical instruments company has for months been farming out about 35 per cent of its defense work,

thereby avoiding the necessity of new plant and equipment. One aircraft company is farming out 50 per cent of its work and its future production schedules call for an even greater percentage. In the case of one ordnance maker output has been stepped up from 125 to 1,000 units per day by subcontracting both parts and sub-assemblies. This company is utilizing its own plant exclusively for the final assembly.

There is an additional reason why farming out is vital to a nation which is in the process of adapting itself to a war-time economy. By bringing work to men and machines rather than the other way around, violent dislocations and disruptions of communities may be avoided; housing shortages and labor turnover can be minimized; the readjustments to a peace-time economy become less painful.

Finally, it is essential to the morale of a people who are asked to participate in an all-out effort that every section of the population be made to feel that it is effectively contributing to defense. The owner of the small machine shop and his dozen mechanics cannot but feel

PHOTOGRAPH BY BAKER, N.J.A.C.



Part of a form typical of those used to list available subcontractors among whom prime contractors may look for facilities. The original had 33 kinds of machines across the top.

disheartened and uninspired by appeals to give of their toil and sweat when their machines and skills are by-passed in favor of the larger establishments. We might remember in this connection that it was not until the war-time experience in England became truly a collective responsibility of every man, woman and child—a people's war—that Great Britain was able to demonstrate to the free men and women of the world the memorable heroism of its own democracy.

There is one aspect of the subcontracting problem which cannot be emphasized too strongly: any prime contractor who thinks he has got his production schedule licked simply by dumping a set of blueprints and specifications on his subcontractor is courting disaster. The prime contractor must not only go into the shop of his subcontractor but he must stay there until he has obtained the desired quantity and quality of output. If the subcontractor does not turn out the first order satisfactorily, the prime contractor should not pull out. He must begin over again—a second, a third, and even a fourth time. But above all things, the prime contractor should afford his subcontractor an opportunity to make some profit on the job. If he farms out only the "headache" type of work, he not only discourages the subcontractor but he is certain to lose his services at the first call of more profitable business.

Whether or not subcontracting "costs more" is, perhaps, debatable. Many concerns have, however, found that it is not more costly to subcontract up to the "break-even" point—a point which will, of course, vary with individual enterprises and types of work. But irrespective of whether subcontracting is more or less expensive, the all-pervading fact remains that the production of war implements cannot be evaluated in terms applicable to normal business practices. For war is, essentially, uneconomic. No matter how you look at it, war is wasteful. A round of ammu-

DISTRICT OFFICE
DEFENSE CONTRACT SERVICE
OFFICE OF PRODUCTION MANAGEMENT
23 SOUTH FIFTH STREET
MINNEAPOLIS, MINN.

No of
Employees

Minneapolis, Minn.

Firm Names.

	Produ- tion Area in Sq Feet	Pro- duc- tion Area in Sq Feet	Tolerances	Turret Lathes	Engine Lathes	Auto- matic Lathes	Lathes Not Classi- fied	Auto Mach Sery
Firm Names.	Produ- tion Area in Sq Feet	Pro- duc- tion Area in Sq Feet	usual	closest				
Advance Machine Co Inc	3	1	3360	.001	.001	1	2	
Anderson Machine & Tool Works	4	1	1200	.0003	.0001	1	1	2
A.G. Anderson Metal Products Co	2	10	7500	.002	.002			1
Baker Valve Co.	5	6	3000	.001	.0005	1	5	
Wm Bras Boiler & Mfg Co.	150	100	175000	.001	.001	3	9	
Butler Mfg. Co.	66	66					3	
Campbell Machine Co.		17	14000			1	4	
C.H. Carlson Mfg Co.	4		7000	.0002	.0000	1	5	
Central Machine Works Co.	43	18		.002	.0001	4	9	
Char-Gale Mfg Co.	15	100	10,000				1	
Cooperative Machine & Tool Co.	5	15	13000	.0005	.0005	1	6	
The Cornelius Co.	57		32000	.002	.0001	5	5	
Cowin & Co.		40						
The Crown Iron Works	45	45	82250	.001	.0002	1	5	
Dayton Rogers Mfg Co		250	32000					
Despatch Oven Co.	28	37	21000		.0005		3	
Diamond Iron Works, Inc.	180	90	75000	.001	.0005	5	10	
Eagle Iron Works Co.	16	8		.001	.001		10	
Edwards Motor Co.	10		8000	.00015	.00025		8	
Erickson Machine Works	4	6	2800			2	2	1
Flour City Ornamental Iron Co.	250	150	150000	.03	.001		2	2
Foley Mfg Co.						1	2	
General Metalware Co.	10	86	129500	.0005	.0005		3	
Gray Company, Inc.	42	39	50000	.001	.001	6	1	
Hart-Carter Co.		81	100000			5	4	



EXPERIENCES *with* SUBCONTRACTING

Many companies have used subcontracting—some over long periods. These greatly briefed experiences are from a larger number described in considerable and helpful detail in "Farming Out Methods," Farming Out Bulletin No. 5, a 72-page booklet issued by the OPM Labor Division.

At the Sperry Gyroscope Co.

HERE SUBCONTRACTING is lifted out of the province of those who handle the ordinary type of purchasing through vendors and administered by a special unit which does nothing else. The subcontracting unit of about 14 persons is under the direction of a subcontracting supervisor.

The subcontracting supervisor is a methods engineer, formerly an exceptional foreman. He knows machine tool abilities, feeds, speeds tool designing, mechanical processing. His assistants report on possible subcontracting plants—equipment, activity, hours worked, expansion, work tolerances. An office staff keeps load charts, records, manhours, delivery dates. Follow-up men check progress in subcontracting plants. Separate from this unit is an inspection staff which inspects the complete inspection by the subcontractor.

New subcontractors receive educational orders on a time and material basis. Cost or price is expressed in terms of hours or minutes. Money rates per hour, calculated for each machine or man, cover wages, administrative overhead, and profit. Sperry takes special pains to keep subcontractors busy constantly.

At the American Machine & Foundry Co.

THIS COMPANY has been designated for specialized mass production of a particular class of munitions. Its equipment consists of a great variety of machines with a high percentage of highly skilled personnel ordinarily engaged in the manufacture of 60 to 75 different types of machinery. It does subcontract work for more than thirteen other companies.

The company studies lists of prime contract awards and sends salesmen out to get the business. The biggest job last year was to train the supervisory force; this year attention is on enlarging the night shift. That it may do a maximum of defense work, the company does not hesitate to put aside its regular work when necessary. It has a plan for farming out some of the work that cannot be set aside.

At Kearney & Trecker

THIS MILWAUKEE milling machine manufacturer has three subcontractors which account for about 18 per cent of Kearney & Trecker's output. Another 20 per cent of all manhours put into the company's product is made by some 70 or 80 concerns. The farming out of work on parts adds more than directly to final capacity as it is work that would otherwise constitute

a series of bottlenecks limiting production at the plant.

Delivery of subcontracted parts is carefully synchronized; subcontractors receive the same information about delivery needs that is given plant departments. A factory machinist familiar with the piece stays with a new subcontractor till acceptable work is turned out; as with Sperry Gyroscope there is an independently set up subcontracting department. Resident and travelling co-ordinators and inspectors are maintained. At the home plant there is complete inspection of parts.

Auxiliary machine shops of well-known, mass production enterprises make high-grade subcontractors. Only two of 125 subcontractors were a failure; about 40 per cent were a disappointment at first. Subcontracted work costs more, but adds to capacity without the expense of plant expansion.

In York, Pa.

A DEFENSE PROGRAM committee of the York, Pa., manufacturers' association surveyed all power-driven, metal working apparatus not in main plants but in and near the city. It investigated the supply of non-defense industry labor having skills useful to defense plants and it worked with unions to facilitate this transfer of labor. Manufacturers go to one another's shops and select the equipment they need, arranging for its use. York Safe & Lock Company conducts subcontracting activities as part of other operations under the company's engineering and production departments.

In the New England States

DEVELOPMENT COMMISSIONS, defense councils, and State manufacturers' associations, all often closely allied, co-ordinate subcontracting in New England. These conduct numerous surveys of capacity, some very complete, some merely the cardinal facts needed at first.

The Connecticut Development Commission has men who take plans for jobs around to a few possible subcontractors. Massachusetts has a similar procedure. The Connecticut State Employment Service offers an index of idle machine hours classified by types of equipment. It lists bottlenecks or surpluses and makes a 60-day forecast of anticipated activities. In Rhode Island the *Providence Sunday Journal* publishes lists of machine hours available for the coming week and the Rhode Island Industrial Commission directs inquiries to the company which has this available time.

dition fired by an anti-aircraft battery does not produce wealth—it wastes wealth. Hence, to say it “costs more” to subcontract items urgently required in military production is to employ the language of normal economics in a non-economic universe.

If by subcontracting we can speed up deliveries of urgently required material for Great Britain and her allies, then subcontracting is the way to do it—“cost” to the contrary notwithstanding.

“It May Cost More”

Call it a “subsidy” or a “bonus”—the precise term is after all unimportant—which the armed services may be called upon to pay to prime contractors for subcontracting a fixed percentage of their orders; whatever the figure might ultimately be, it would still be a cheap price for catching up with time. It may “cost more” now, but tomorrow may be too late even to figure cost.

If subcontracting is to become successful, there must be a co-operative partnership between prime contractors and subcontractors—a partnership of brains, skill, and mutual trust.

If subcontracting is to be freighted with success for the armed services as well as the prime contractor and his subcontractors there must be present a directional effort which the smaller, less technically experienced concerns usually are unable to supply. For one thing, the smaller enterprises are not geared

up to handle fast line production. For another, they do not customarily have the necessary complement of tools and machinery; nor do they generally possess the trained engineering and technical organization required for the production of war material.

The small shop—excellent though its tools may be and despite its skilled workmen—is usually unable to bid effectively on defense work. In the first place, the owner of the small shop lacks the background of experience upon which to estimate the cost of production of defense material.

In the second place, the small entrepreneur frequently hesitates to bid because of the uncertainties incident to the undertaking of any large-scale defense contract. A \$50,000 contract extending over six months may well take the small enterprise into waters beyond its depth. It has, therefore, been the experience of the armed services that the smaller shops can function more effectively if they are organized into satellite groups of subcontractors which revolve about the orbit of a technically competent prime contractor.

The fact that a potential prime contractor has no experience with the manufacture of, say, cartridge cases or fuses or gas masks, or is not altogether “tooled up” for undertaking the production of such items, is not necessarily a reason why such a contractor should not assume the management leadership

of a subcontracting group. If the prime contractor possesses an itemizing, engineering, technical, and administrative organization with the essential “know-how” for normal business operations, it can also do a munitions job, rounding out the shortages of essential equipment through the utilization of *available* and *suitable* subcontracting facilities.

Defense production has not moved into high gear largely because prime contractors have been playing their defense orders “too close to the vest.” Until we mobilize the men and machines of the medium and small-size shops—even the smallest garage and repair shops on the back streets and alleys—the industrial throttle will be only half open. If we are to meet our stated obligations to the democracies of the world, we must in the next few crucial months accomplish a widespread farming out of defense orders. American business has yet to accept the challenge of supplying management leadership for an army of subcontractors.

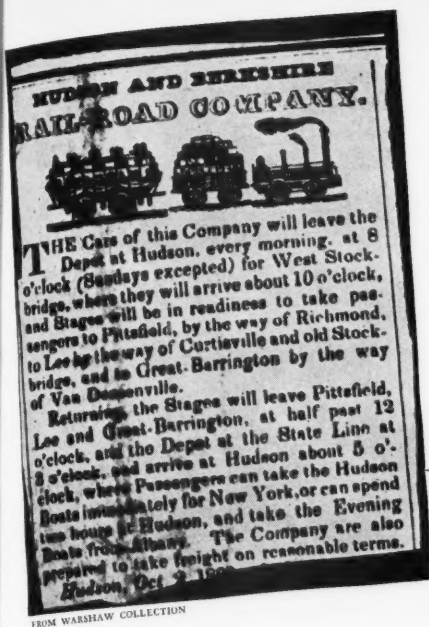
The D.C.S.

Effectively to implement this urgent and pressing job, the Office of Production Management has established in its Production Division the Defense Contract Service. The task of this Section is to assist the armed services to speed up their production schedules by mak-

(Continued on page 45)



AT CAMP DIX—PHOTOGRAPH



EDITOR'S NOTE:

*I*F 1841 is a diabolic year in the light of current events, 1841 was messianic. It was a year of prophets, both false and inspired, all of them contributing to the lifting of the curtain on the era of big business. One, Ralph Waldo Emerson, speaking at the Mechanic Apprentices Library Association in Boston on January 25, 1841, said: "The employments of commerce are not intrinsically unfit for a man, or less genial to his faculties, but these are now in their general course so vitiated by derelictions and abuses at which all connive that it requires more vigor and resources than can be expected of every young man to right himself in them; he is lost in them; he cannot move hand or foot in them." William Cullen Bryant in a poem written at about the same time warned of the "merchant and his snare."

The year 1841 represented a period of inventory taking in national and moral

In 1941 THE MERCANTILE AGENCY, DUN & BRADSTREET, INC., celebrates its centennial of continuous service to American business. One hundred years ago Lewis Tappan founded a centralized bureau for the impartial reporting of credit risks—the first of its kind and distinctly American in its genesis. Mr. Tappan was succeeded in his proprietorship by Benjamin

Douglass in 1849 and Mr. Douglass was succeeded by R. G. Dun in 1859. Here Mr. Sullivan pictures the American scene in Tappan's time, and the circumstances which led to changes and reforms in banking, credit procedure, and trade in general. It was a period of social experiment in which many ideas were planted and a few took root. THE MERCANTILE AGENCY was largely the design of necessity in the expanding trade of a young empire.

values. The nation was still in the slough of economic despond and the mercantile system was taking severe punishment, largely through the collapse of the banks. President Tyler was quarreling with Congress over the new banking legislation. All members of his Cabinet except Daniel Webster resigned in September, 1841, when the President vetoed the bill establishing "The Fiscal Corporation of the United States."

Reformers of every stripe—economic, religious, and social—were springing up in various parts of the country. Emerson's essays first appeared in 1841 and had a tremendous effect upon the public mind. He said, "They [Americans] rely on the power of the dollar; they are deaf to sentiment." Again he says, "America is the paradise of the economists; it is the favorable exception

invariably quoted to the rules of ruin." Emerson's "transcendental" philosophy was looked upon as a corrective to the materialism of Yankee morality. The Transcendentalists, reflecting a creedless viewpoint, attempted to give example as well as precept to the materialists of the country.

The pattern set up before America in 1841 was the Brook Farm Colony near Boston, with Dr. George Ripley, a Unitarian minister as sponsor. The Reverend Ripley, encouraged by George Bancroft, the historian, believed that a communal life would "insure a more natural union between intellectual and manual labor." Bronson Alcott and Margaret Fuller were among the energetic leaders of the group. Writers, liberals, preachers, and aesthetes joined the colony. They worked in the fields by day, and indulged in cultural dis-

1841

The Year of the Prophets

A. M. SULLIVAN

Associate Editor, DUN'S REVIEW



FROM WARSHAW COLLECTION

Canal, toll road, and railroad operators often applied for bank charters under which they obtained permission from the States to issue their own printed bank notes.

cussions in the evenings. They had the support of Emerson and the interest of Charles A. Dana, later publisher of the *New York Sun*. In the group for a period was Isaac Hecker, of the flour milling family, who later became a Catholic priest and founded the Paulist Order. Orestes A. Brownson, stormy petrel of religion and sociology, was editing his magazine the *Boston Quarterly Review*. Bronson Alcott sponsored the vegetarian movement as a side issue; and Margaret Fuller became an ardent proponent of feminism.

Among the first writers to join the colony in 1841 was Nathaniel Hawthorne, but his body was unequal to the rigors of labor in the vineyard. He wrote, "After a hard day's work, my soul absolutely refuses to be poured out on paper" and intimated that a man's higher thoughts can be handicapped equally by serving nature or Mammon too well.

The Brook Farm social experiment lasted four years, but did nothing to demonstrate itself as the effective antidote to or substitute for the mercantile system. It did prove to be an interesting meeting ground for individualists with nothing in common but the common foe. Ironically enough, Brook Farm went out of business as a mismanaged business venture.

As a man saved from drowning is willing to take swimming lessons, Americans were susceptible to all kinds of suggestions from economic theorists in 1841. During that year Clinton Roosevelt published his *Science of Government, Founded on the Natural Law*. Albert Brisbane, father of Arthur Brisbane, was preparing a book propounding the Fourier ideas in Communism. Robert Owen, British pioneer in social experiment, was trying to get Congress to provide a million dollars for the establishment of a model town in which his theories could be tested under the Government auspices. Joseph Warren of Cincinnati at this time was experimenting with a new form of negotiable script called "labor notes" or sweat money.

New Deal—1841

Clinton Roosevelt's 1841 "New Deal" deserves some special attention. Unlike the other theorists, he did not abandon the mercantile system, but would have disciplined it within the strictures of his pattern of a new social, political, and cultural order. Roosevelt was a man of great vitality and almost bridged the nineteenth century, 1804 to 1898. A distant relative of both Theodore and Franklin, he exhibited the

clan interest in political philosophy. He was a critic of Alexander Hamilton, and especially of Hamilton's ideas on a protective tariff for American industry. Roosevelt considered and dismissed the ideas of the French Communist, M. Fourier, and of Robert Owen as impracticable. He admired their aims but questioned their judgment and defended the right of the mercantile system in society. This right Fourier and Owen rejected as an inherent evil.

Thus, a generation before *Progress and Poverty* was written by Henry George or *Das Kapital* by Karl Marx, men like Roosevelt, Fourier, and Owen were toying with new worlds of order, and new philosophies. They builded on or borrowed from Plato, from Adam Smith, from Ricardo, and other adventurers in the fields of social and political economy, but they did some original thinking, even if most of it was wrong. No picture of a Utopian design has been blueprinted so aesthetically as Clinton Roosevelt's "New Deal" of 1841. He overlooked no human desire except the desire for change, setting up this plan of the three orders: In the first came Agriculture, Manufacturing, and Commerce. In the second order, Law, War, and Medicine; and the in-

clusive third order named Natural History, Physiology, Moral Philosophy, Literature, Mathematics, and the Arts.

The administration of manufactories would be under a "Marshall," assisted by a "chief engineer," or by four divisional heads covering printing, textiles, metals, drugs, and processed foodstuffs. Roosevelt divided and sub-divided each economic, moral, and cultural responsibility in a manner to invite the envy of Plato and Sir Thomas More. For instance, values were to be determined by a Board of Appraisers. The merchant or manufacturer would be given a certificate of approval, permitting him to sell his goods. For his labor the craftsman would receive a bill of exchange, to wit: "On demand the Eclectic Association promises to deliver to the bearer the produce of one day's labor." Roosevelt adds, "By this simple process there can be no stagnations of trade, or appearance of excessive production or population, or usury, or bankruptcy, or want of any kind, in any man disposed to labor. All may be absolutely certain of a competency, and none need suffer as at present, when banks refuse to discount. No distortions of the body from excessive fatigue, nor early death from long continued deficiencies of nourishment. No desperation from want, nor crime, nor

blasphemy of the Deity because those who earn all secure nothing, while those who do nothing valuable to society accumulate the fruits of industry of all others."

Technocracy

About the same time, Joseph Warren, in his book *The True Civilization*, proposed a similar unit of exchange, based on labor. Both suggestions for a "labor standard" of currency sound familiar to those who were tempted to examine the claims of the 1930 technocrats, who proposed the issuance of "ergs" or negotiable units of energy. Joseph Warren tested his idea for the circulation of "energy money" in 1841 in his store at Harmony, Ind. Warren refused to accept cash for goods—issuing and receiving the "labor note" or script as a medium of exchange. He found humanity a little unwilling to approve his method of reducing the fruits of toil and soil to this idealistic denominator.

Money panics always invite remedial panaceas and a challenge to the metallic system of coinage. The need for a

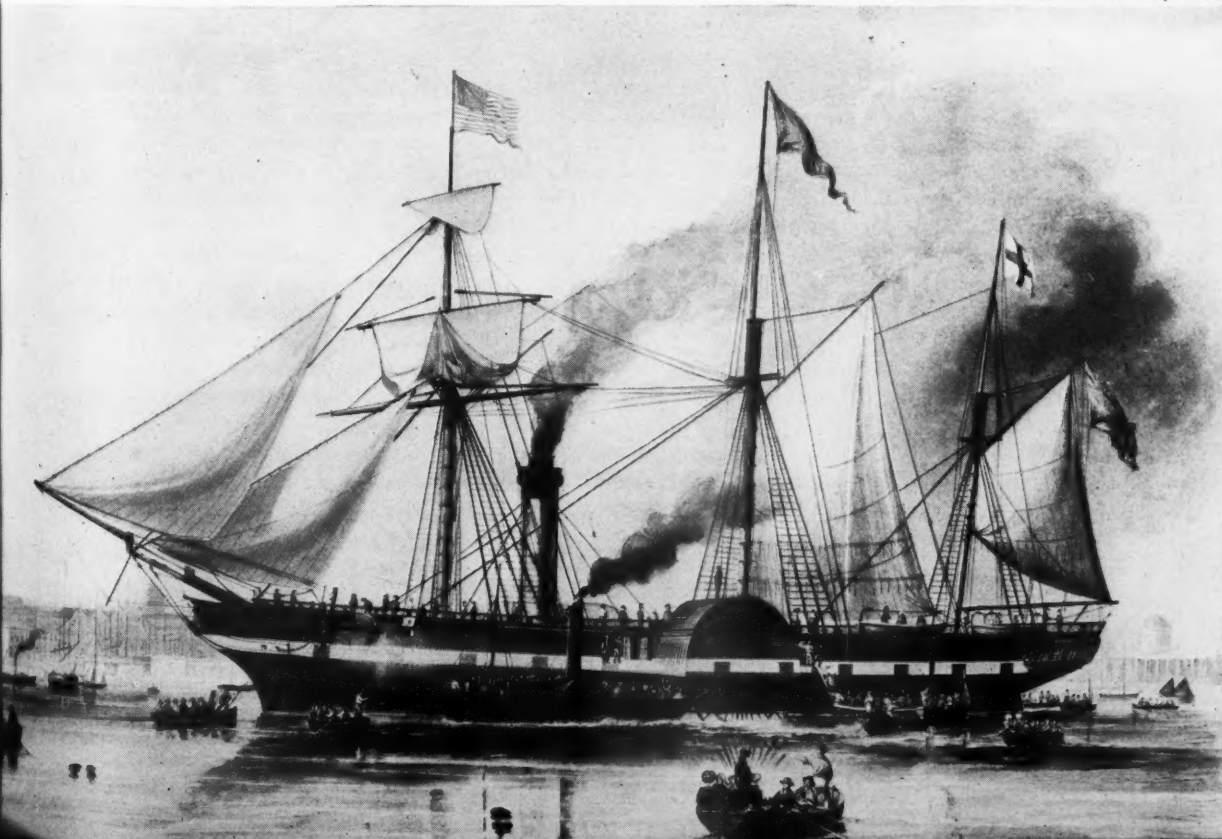
financial panacea was greater in 1841 than in 1931 or 1941; because the average small community with one bank might have in daily circulation not more than \$100 in specie. All other moneys were bank notes, interspersed with canal, toll road, and railroad paper currency.

Fourier's idea of a communal society took deeper root than that of any other missionary of anti-capitalistic doctrines. E. Douglass Branch, author of *The Sentimental Years*, has this to say of Fourier: "Francois Marie Charles Fourier was a solitary philosopher with a chess player's mind. He disposed his pieces, Labor, Capital, and Talent, into a symmetrical pattern, reconstructing society grandly and in its tiniest details."

While the scope of Fourier, Owen, and Roosevelt was communal and socialistic, atheism had no part in their doctrines. As Marxian Communism attracted a few of the intelligentsia of 1920, Fourier's doctrines found converts among poets, educators, and newspaper men in 1841. The principal end to be

The disappearance of the S.S. President on her eastward voyage in 1841 was our first great sea tragedy among steam propelled vessels. The ship was owned and operated by Junius Smith, a former Connecticut Yankee, living in London. The vessel sailed from New York under a Lieutenant Roberts on March 11, 1841 and was never heard of again. It was sighted last by a passing westward-bound vessel, making slow headway in a turbulent sea. Despite rumors of survivors, none were ever proved.

COURTESY OF THE N. Y. HISTORICAL SOCIETY, NEW YORK



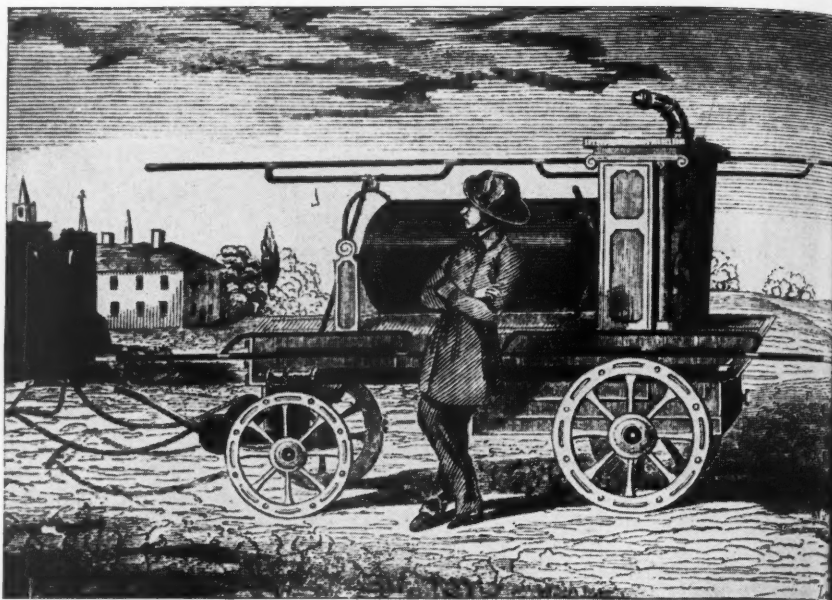
attained was the elimination of the "idler and non-producer," that is, the merchant, jobber, banker, and lawyer. At Boston the intellectual moths to the Fourier candle were the poets, Christopher P. Cranch, Parke Godwin, and journalists and essayists like Henry James, Timothy Dwight, and William H. Channing. Some of these contributed to the *Phalanx* and *The Harbinger*, journals devoted to the new social doctrines.

In 1841 Horace Greeley founded the *New York Tribune*; and that enterprising editor donated considerable space to the "communal" experiments for their efforts to "banish want." Aided by this, the effects of 1841's social and economic conjecture gave birth to several experimental communities. The North American Phalanx was founded in 1843 on a square mile in Monmouth County in New Jersey, known as the Van Mater farm. Its founder was Albert Brisbane. About 100 people lived on the land, farmed it, and ate at a common table. The land purchase was financed by ten or twelve families who subscribed \$8,000. After eleven years of effort, the experiment, "Brisbane Hill," failed, after the fashion of some 75 other communal adventures. While the experiment ended ignobly, the original investment did not; stockholders got all of their money back as a good real estate investment in the Van Mater farmland.

A Phalanx Profit

Other* Fourier experiments: "The Alhadelphia Phalanx, founded in 1844, with a domain of almost 3,000 acres in Kalamazoo County, Mich., had almost 500 members; but internal bickerings dissolved it within less than three years. The Wisconsin Phalanx, established in 1844 by 32 families who purchased about 2,000 acres of public lands in Wisconsin, near Green Lake, prospered under the expert management of Warren Chase. Speculative interest in Wisconsin lands pushed the value of its domain sharply upward, and in 1850

* See E. Douglass Branch, *The Sentimental Years*.



FROM "THE FAMILY MAGAZINE," 1841

The hand-pumped fire engine was used rather ineffectually in the great fire of 1835. As the flames approached his famous silk store on Pearl Street, New York Negroes helped Arthur Tappan salvage much of his merchandise. There were 64 fire companies at about that time; each company consisted of 26 men. The pay was only \$100 a year, but then being a fireman was not a full-time job. Six hundred and fifty-four stores, shops, and houses were destroyed in the fire of 1835, and the firemen complained about the inaccessible heights of the six-story buildings.

the Wisconsin Phalanx yielded to temptation. The lands were sold, and the stockholders received the whole of their investment plus 8 per cent. No other phalanx wound up with a profit."

To understand the emotional turmoil of the public mind in 1841 it is necessary to consider the background of American life at the time. The country was recovering its equilibrium after an economic "binge," mainly the result of uncontrolled speculation in prairie real estate. Andrew Jackson, both provocateur and disciplinarian, had administered the knockout punch in his famous Treasury circular calling for specie payments for Government lands. "Hard money," the post office posters called for, and coin was so rare that a penny would be lost in a haystack of banknotes. America took its first great economic jolt in an air of incredulity. This was the Promised Land, but the milk and honey suddenly disappeared by Government edict. Business was stunned, and considerable trade was conducted on a barter basis until confidence

was restored. Jackson, implacable foe of the Bank of the United States, saw this keystone of the banking arch fall on October 11, 1841.

The extent to which the panic of 1837 and the subsequent minor one of 1841 affected American life is described by James Truslow Adams in his book, *The Epic of America*. Boats crowded idly at the docks and all construction work stopped. Most of the factories of the East were closed and some 50,000 workers in shoe factories in Massachusetts were without jobs, while two-thirds of the clerks in the mercantile houses of the seaboard were out of work.

The mercantile system, divided quickly into the "big houses" or importers in the coastal cities, the city jobbers, and the country traders, had its problems. There was a great variety of paper currency in circulation, a large portion of it counterfeit. The cautious merchant or banker always had his detecting equipment at hand. "At one time," E. L. Bogart tells us in his *Eco-*

conomic History of the United States, "there were as many as 5,400 different kinds of spurious or counterfeit notes in circulation." Bookkeepers often kept dual columns of figures, American dollars and English pounds. Newspapers published daily sheets showing the discount rate on currency issued by the State banks, canals, toll roads, and railroad companies. These, by State indulgence, issued their own money and frequently made the most of the opportunity.

"Pie in the Sky"

Prior to the panic of 1837, leading American merchants and bankers had given serious study to the chaotic affairs of trade and finance, and looked for a plan by which to stabilize credits. Average terms were six months, subject to cash discounts, but the credits to country traders often ran eighteen months or two years.

The period of 1825-1840 in America has been called "adolescent." A new empire was growing too fast for its youthful attire of laws, moneys, and social pattern. A more fitting term might be "juvenile delinquency," because not all of the financial suffering could be traced to growing pains. There was "pie in the sky" but it was west of the Alleghenies. Sense of values was warped by mirages on the expanding horizon. Even the Government abetted the Utopian philosophy in its program to fill the West with settlers. Conservative merchants and bankers saw danger ahead and sought some control, especially of the insolvent debtor, who wore his

failures like wound stripes on a sleeve.

A few earlier attempts at control had met with little success. A bill calling for a uniform bankruptcy law had come before Congress as early as 1812. It was rejected or ignored annually by a disinterested majority. In 1833 a study was made of the Code Napoleon by the Board of Trade of the City of New York, with a view to adapting it for American commercial usage. The committee, consisting of John Ely, Silas Brown, and Lewis Tappan, praised the document and recommended that its provisions on bankruptcy were especially applicable to the United States. The committee reported: "The national legislature having refused to pass a bankrupt law, and the State legislature in the absence of such law adopting different rules, and varying them almost annually, our economic securities are subject in a fearful degree to uncer-

tainty, inequality and fraud. If no legislative enactment can be had from Congress, it would be desirable that there should be a concert among some of the leading commercial States to agree upon a uniform code. In the meantime it is submitted whether the merchants by voluntary associations, agreeing to accept of no composition where references have been given or suffered, and when the books and papers are not exhibited, or do not present a fair and satisfactory statement, may not, indirectly, and to a considerable extent, accomplish that which is virtually denied to them in the present state of deficient, fluctuating, and unequal legislation."

The Uniform Bankruptcy Law was finally passed in 1841 as a raft to the floundering merchants. It was badly drawn and tended to injure the reputable people who needed temporary respite.

It was thoroughly abused by adventurers who made the most of the opportunity for evasion of just debts.

William Brown, an English clothier, estimated that English merchants and capitalists lost \$100,000,000 through this law. The following year it was repealed. Freedley, in his *Manual of 1851*, states that the total number of applicants under the law of 1841 was 33,739, with a total debt of \$440,934,615, of which \$43,697,307 was retrieved. It is a curious thing to observe that the average amount realized was 10 per cent, a percentage close to typical bankruptcy settlements in the present year.

The angry Mr. Brown offers a picture of the

Martha Eliza-
son, for Boston,
only, from Syd-
Republic, for
previously sup-
erson, hence,
ie Hosphorus
for NYork or
kntr, for New
Knox, for New
ney, Cardiff,
ardus, diag.
silla, Crowell,
ic, for Bangor,
yflower, Mon-
remained 3d
a, Whitney, 7
ay, Savannah,
ng, for Boston,
-so reported.
rk 8th, brig
nlaw, NYork;
k. Cld prev.
Merwin, New

WANTED Immediately, a young man in a
store—one that is perfectly acquainted with the
book business and is a good penman. None need apply
without a written recommendation from his last employer.
jy 20
ISRAEL FORT, 68 Bowery.

DISSOLUTION—The co-partnership heretofore ex-
isting between the subscribers, under the firm of
Arthur Tappan & Co. was dissolved on the first instant, by
mutual consent.
New York, July 20, 1841.
ARTHUR TAPPAN,
LEWIS TAPPAN,
ALFRED EDWARDS,
WILLIAM EDWARDS WHITING.

CO PARTNERSHIP—The undersigned will continue
the business under the same firm at the old stand, No. 123
Pearl-street.
ARTHUR TAPPAN,
ALFRED EDWARDS,
W. E. WHITING.

LEWIS TAPPAN, Mercantile Agency, No. 7 Den's
Building, corner of Hanover and Exchange-streets, in rear
of Merchants' Exchange.

This agency has been established with the concurrence
of many experienced merchants in this city and in the coun-
try, for the purpose of obtaining, in a proper manner, intelli-
gence of the responsibility of merchants visiting the mar-
ket from different parts of the country to purchase goods
from time to time—the same to be inspected, with proper
limitations and restrictions, to such merchants and others
as may be disposed to patronize the agency, and become
subscribers thereto. The terms, and the plan and greater
detail, will be made known on application as above. Mer-
chants interested in such sales are respectfully invited to
visit the office.
jy 20

THE HOLDERS of the Coupons of the state of
Indiana, due on the 1st instant, can have the same ex-
changed in sums of one thousand dollars for bonds of said
state bearing interest at seven per cent per annum and re-
deemable in two years on application at the office of Na-
thaniel Stebbins, No. 20 Merchants Exchange.
N. NOBLE,
Fund Commissioner of the state of Indiana.
jy 20-31

This advertisement from "The New York Commercial Advertiser" of July 20, 1841 shows the withdrawal of Lewis Tappan from the firm of Arthur Tappan & Co., silk merchants, and the first public announcement of the establishment of The Mercantile Agency, which opened its doors on August 1, 1841, at the corner of Hanover and Exchange Streets in the rear of the Merchants Exchange, which had just been rebuilt.

inept manner by which the law functioned. He says, "In the year 1841 a general bankruptcy law was passed by the Federal Congress, of which about 34,000 persons took the benefit in five months; but there was such an outcry made by other countries that it was repealed; however, as long as it lasted, they made the utmost of it. A man to get clear of his debts had only to declare himself a bankrupt, and he was ordered to attend the commissioners. Those at Cleveland had to attend at Chillecothe, nearly 200 miles distant: the commissioners had from 1,000 to 2,000 each day, and the reader may judge of the scrutiny the bankrupts had to undergo and the sifting of their accounts, by the number to be examined.

Give and Take

"Yet they got all their papers and came home, very few people knowing that some of them had even been bankrupt at all. The property was, no doubt, transferred for a time to a brother, father, or a friend; and after a short time was delivered back to the white-washed bankrupt, now clear of his debts, and both ready and willing to lend a helping hand to his friends in the like emergency. The great regret of this class of traders was, that the act did not go far enough, and take corporations as well as individuals; in which case they could so easily have sponged off their foreign debts, and left John Bull and Johnny Crapeaux to seek their own remedies. Some States, however, were determined to have their share of the plunder and stop the interest of their debts, and for years they never paid one cent for either interest or principal."

The method by which some banks came into being at that time was a curious combination of sleight-of-hand and financial wizardry. Bank commissioners under the Act of Congress had wide powers in the issuance of charters. Many banks born during the Jackson Administration were of the "wild-cat" variety. Inland bankers endeavored to give a nationwide distri-

bution to their notes, and the more they could get in circulation on the seaboard the better. They seldom issued their own notes at the cashier's window. Cautious New York suppliers made all bills payable at New York in "bankable" money. This avoided the embarrassment of selling in the South and Southwest at a paper profit but actually losing on the deal when discounts were published.

The English clothier from Leeds describes the birth of a wild-cat bank in the prairie States in 1843. "I will describe the establishment of the two banks in Cleveland, viz., the Commercial Bank of Lake Erie and the Cleveland Bank, which were established at the same time as almost twenty other banks in the same neighborhood. A company of merchants, shopkeepers, and others was formed; a president, manager, cashier, teller, and clerks, were appointed, as well as a full directory. This kind of thing was carried on simultaneously in all the banks, say about twenty, situated in or near that part of Ohio called the Eastern Reserve, or New Connecticut. As soon as everything was ready for the inspection of the Commissioners, they were invited to come on a certain day to visit them, examine their stock of specie, bills, etc. Accordingly they arrived in Cleveland from Columbus, the capital of the State, on the appointed day, and were ushered into the Bank of Lake Erie. The money bags were exhibited before them, as well as the bills, which being duly counted were then passed, the certificate signed, and the Commissioners invited to take a recess in the manager's house.

"As soon as their backs were turned, the same money, which they had seen, was immediately removed over the way to the Bank of Cleveland, and there passed another inspection by the same Commissioners, and being found o.k., or, all correct, the papers were duly filled up as before; another recess was taken, and the money was immediately transferred to the Bank of Norwalk; from thence, always preceding the

Commissioners, it was sent to Massillon, Paineville, Akron, Medina, and to every place to which the Commissioners were authorized to go. The banks were all declared competent to begin issuing their own bills, and everything went on in a flourishing manner. The Directors being all in business in some way or other, some as shopkeepers and some as land speculators, etc., were the principal customers of their own banks; they drew out as much money (as they called their bills) as they pleased; and, if one was gently reproved, he had only to draw a good large bill, get another person to endorse it, and then his account had a respectable appearance."

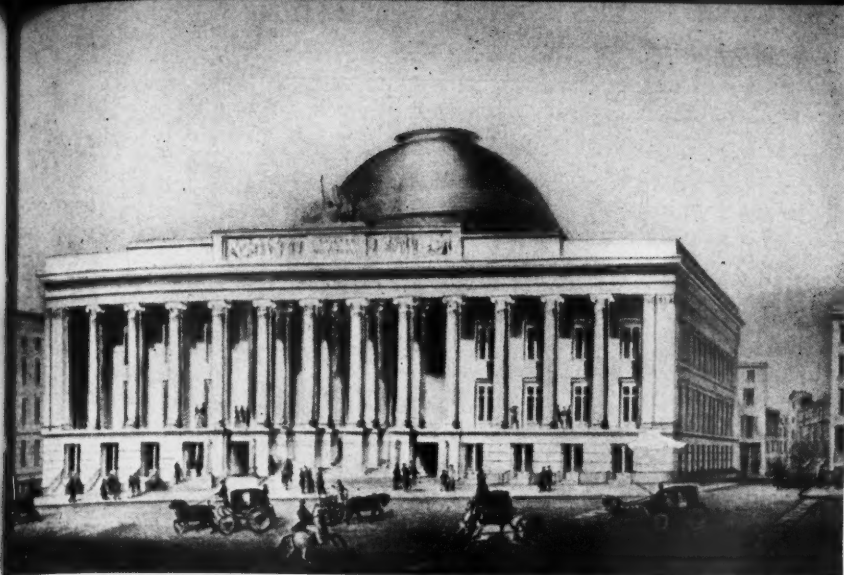
Henry W. Lanier in his *Century of Banking* (1822-1922), speaking of the chaotic condition of the currency said, "It should be remembered that banking in America always implied a right and a practice at variance with that of the great foreign banks, the right to issue paper money as a substitute for specie currency." In dealing with the bank failures of 1841, Lanier points out that of the eleven banks that failed in New York State, only two were in New York City, and one paid its obligations in full.

Banking Reforms

During the height of the bank note expansion, there were always bankers and merchants of sound judgment crying out in the wilderness. Eventually their voices were heard in the State and national legislatures. One such voice was that of Albert Gallatin, president of the National Bank of New York. He issued a pamphlet in 1841 calling for a regular exchange of "notes and checks," and actually prepared the way for the Clearing House idea, which as Lanier points out, came into being a dozen years later.

It is not difficult to understand why the merchant of 1841 had many problems in pricing his merchandise, making terms of sale, and passing on the worthiness of a credit risk. To recapitulate a few reasons:

1. Variety of moneys in circulation
(Continued on page 54)



PHOTOGRAPH COURTESY NEW YORK CITY MUSEUM

☆

The rebuilt Merchants' Exchange, occupying the area on Wall Street from William to Hanover Streets, was opened in 1841. The original building had been destroyed in the fire of 1835. Philip Hone, former Mayor of New York, records in his diary of November 17, 1841 that "The rotunda of the Merchants' Exchange on Wall Street, the magnificent room in which the merchants of New York are to 'congregate' was opened this day for their use." He reported that the whole expense of the new building was "short of \$2,000,000."

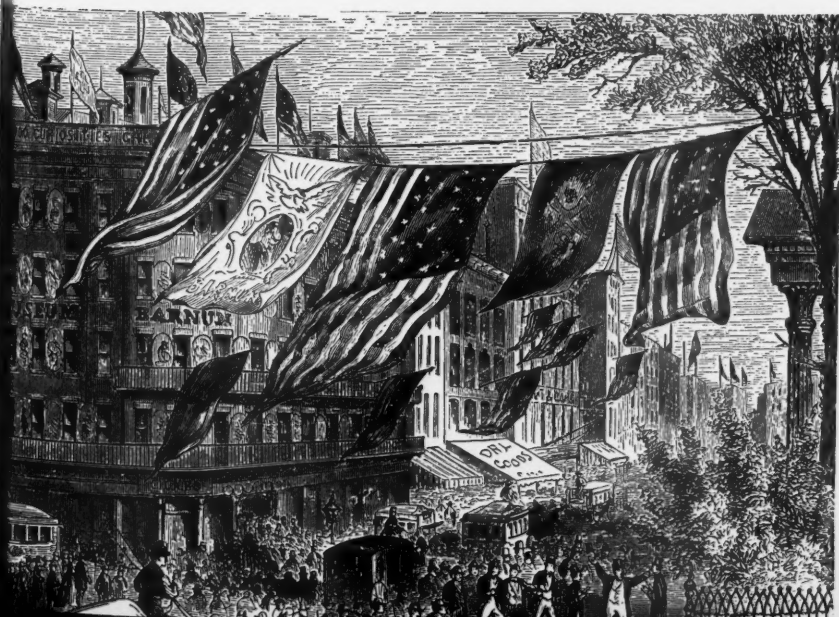


MUSEUM OF THE CITY OF NEW YORK—J. CLARENCE DAVIES COLLECTION

☆

"The Times," a lithograph drawn by H. R. Robinson in 1837 showing the dire effects of the financial revulsion in New York when trade was paralyzed as the result of President Jackson's Specie Circular of 1836. Ships are tied up at the wharves; the craftsmen are without employment, the slave stands at the auction block, and the citizens resort to liquor to forget their misery. The sign "Shaving" is not a barber's advertisement but refers to the practice of discounting notes. The pawnbroker's office is crowded and the sheriff is busy executing seizures of property. The Customs House "demands specie" but the bank next door says "no specie payments made here." The sign on the ground reads "all those who trade on borrowed capital should break. Perish credit. Perish commerce." The top-piece in the sky is Andrew Jackson's "White Plug Hat." The eyeglasses are the "rose colored" or "glory" spectacles of President Van Buren. The "Safety Fund," bursting in mid-air, is the reserve deposit fund which was set up and used in the eastern banks as a stabilizing influence.

☆



On December 27, 1841, P. T. Barnum wrote to the President and Directors of the American Museum saying, "It gives me great pleasure to inform you that you are placed upon the Free List of this establishment until further notice. P. T. Barnum, Proprietor." That was the first intimation to John Heath and his fellow directors that Barnum had acquired the American Museum. Barnum was asked what he used for money and replied: "Brass, for silver and gold I have none." The accompanying cartoon is from Barnum's book, "Struggles and Triumphs or Forty Years of Recollections," an autobiography written in 1869.



COLUMBIA BROADCASTING SYSTEM PHOTOGRAPH

RADIO IS—AS RADIO ADVERTISING DOES

GEORGE T. BRISTOL

Editorial Staff, DUN'S REVIEW

FOR THE CHEER of music, for companionship in a lonely house, for news, for help with tonight's supper, for the gratification of knowing more than Mr. X on Quiz Program Y, nearly a billion dollars was spent in the United States in 1940. Of the billion dollars, listeners spent three-quarters directly, on sets, electricity, supplies, and service, so that they might hear programs which cost almost another quarter billion.¹

At the end of the year radio listeners were operating 50,000,000 sets. In 29,000,000 homes there was one radio at least. In 11,000,000 homes there was a second set, sometimes a third or fourth. Auto radios numbered 8,000,000; battery portables, 1,800,000.¹ The 29,000,000 homes with radios were 85 per cent of the "occupied dwellings" counted in the 1940 census. And so complete was the saturation of homes by radios in the

more populous and wealthy States that State indexes of radio-homes' buying power would scarcely have been worth the trouble of making them. Simple indexes of State income payments would have served just as well.

Thus encouraged, advertisers spent in 1940, for time alone, \$158,000,000 (net sales, after cash and frequency discounts). For talent they spent enough more to bring the total to \$200,000,000. Thirteen years before (when there were radios in 6,000,000 homes; when already Amos and Andy were an established institution) gross time sales had been less than \$5,000,000. Even five years before, in 1935, they were only \$80,000,000,² plus \$7,500,000 for talent.

At the 1940 level of \$158,000,000, or \$200,000,000 with talent, radio advertising was some 10 or 12 per cent of the year's estimated advertising expenditure of \$1,660,000,000. It compares with \$545,000,000 in newspaper,

\$300,000,000 for direct mail; \$225,000,000 in magazines; \$50,000,000 for "outdoor"; and \$340,000,000 for miscellaneous means. These are rough estimates, says the compiler, Dr. L. D. H. Weld, Director of Research, McCann-Erickson, Inc.³ Besides the difficulties of estimating expenditure totals at all exactly, there are added questions as to whether such comparisons are most valid with or without advertising agency and other discounts, talent costs, art and mechanical preparation costs, and so on. Certainly radio advertising has grown in a decade and a half to a total volume about one-third that of newspapers and already approaching that of all other periodicals except newspapers.

But though radio has become a stalwart competitor of newspapers and magazines, as an advertising medium it is not entirely comparable with them. Newspapers and magazines supply editorial content. The advertiser and his

¹ *Radio Today*, March 1941.

² *Broadcasting Yearbook*, 1941, and a letter from Dr. H. S. Hettinger.

³ *Printers' Ink*, April 4, 1941.



Out of the loudspeaker genius and the chords of music: Toscanini suspends his audiences on a breath and Benny Goodman swings them out of breath, to the glory of Apollo or St. Vitus.

agency specialize in telling their story, making their sale. In radio the advertiser buys the whole editorial frame. By committing himself to fill it, the advertiser, whether he recognizes it or not, inevitably enters show business—as the \$40,000,000 bill for talent testifies.

Not only does radio advertising, as show business, differ from advertising in newspapers and magazines. Radio advertising differs from show business to the extent that it is radio. This is no aphorism. A radio program audience is almost certain to be different from the theater audience whose membership is formed by the peculiar qualifications of wanting to see Cornelia Otis Skinner and having \$3.30. A radio audience will be less attentive than the poorest motion picture audience by several hundred hands of bridge, by several

thousand columns of newsprint, by innumerable conversations. It will be of uncertain size. A radio audience will almost always be less susceptible to mass emotion than 200 elbow-to-elbow witnesses of a high school play.

The advertiser who has paid good money for a good program, by golly, may confidently believe that 50,000 eager listeners turn on their radios promptly at 11:30 A.M., listen raptly for fifteen minutes, and at 11:45 exclaim "My, wasn't that nice. I'll go out and buy a can for lunch."

His audience is likely to be better and worse than this. Better, because he may catch not 50,000 but 100,000. Worse—unless he has astutely sold the program in newspapers, window displays, and

other broadcasts—because it will not be single-mindedly intent upon his program. In interest and purposefulness, the typical radio audience is collectively much like a housewife who drops in at a movie because she has finished her shopping sooner than she expected to. She may stay for the whole show and catch the late bus home. And then again, she may not. But attentive or not, she is there. At least 85.5 per cent of all radio families (the latest surveys were made in 1937, 1938, and 1939)⁴ listen to their radios some time each day. For two-fifths of the families, liv-

⁴ "Study of Rural Radio Ownership and Use in the United States," published by Joint Committee on Radio Research (National Broadcasting Company and Columbia Broadcasting System) February 1939; "Urban Radio Listening in the United States," published by National Association of Broadcasters, Columbia Broadcasting System, and National Broadcasting Company, March 1941.

NATIONAL BROADCASTING COMPANY PHOTOGRAPHS



ing on farms and in towns of less than 2,500 population, this figure is 88.5 per cent. For the other three-fifths, urban families, it is 83.7.

In cities, evidently, the competition of other forms of entertainment (not to mention commuting) keeps many potential listeners from their radios. But the point which is lost in simple urban *vs.* rural comparisons is that radio listening scarcely falls off at all until one reaches cities of 250,000. There only 80 per cent of radio families listen daily. In the 25,000-250,000 classification it is 86.2 per cent; in the 2,500-25,000 group, 86.7 per cent.

Weekdays, Mondays through Fridays, a slightly higher proportion of radios are in use than on Saturdays and Sundays, in both rural and urban families. Sunday listening seems to be a little better than Saturday's.

The average length of time radios are in use in all rural radio homes is 4 hours, 47 minutes a day; in urban radio homes, 4 hours, 17 minutes; in country and city together, 4 hours, 28 minutes. If these averages are calculated on the basis of those sets in use at some time during the day, and not on the basis of all sets, the average daily *set-use time* is 5 hours, 10 minutes.

Best season for a big audience is Winter (87.8 per cent of all urban radio

families listen sometime each day); next, Spring, 86.6 per cent; then Fall, 82.3; last, Summer, 77.9.

The latest complete analysis of what the radio audience is being given, in advertiser-sponsored and unsponsored programs together, is now two years old. Undertaken by the Federal Communications Commission and covering broadcasts of all commercial stations for an entire week, the survey indicated that one-third of the time was sponsored, that a little more than half of the time (sponsored and unsponsored) was used for music. Of non-music time 9.1 per cent was devoted to drama programs (1.6 per cent children's drama); variety, 8.8 per cent; talks and dialogues, 11.4; news, 8.6; religious, 5.2; special events, 2.2; miscellaneous, 2.3.

Program Changes

So it was one week in 1938. How, quantitatively, have radio programs changed in recent years? Data not entirely comparable with that of the FCC, National Broadcasting Company network programs sampled periodically over eight years, demonstrate that by 1939 the proportion of music time had decreased one-tenth from 1932. But of the music broadcast, the percentage which was popular music had increased from 55 to 75. In the eight years the

time for talks and dialogue had increased slightly. Drama time had doubled.

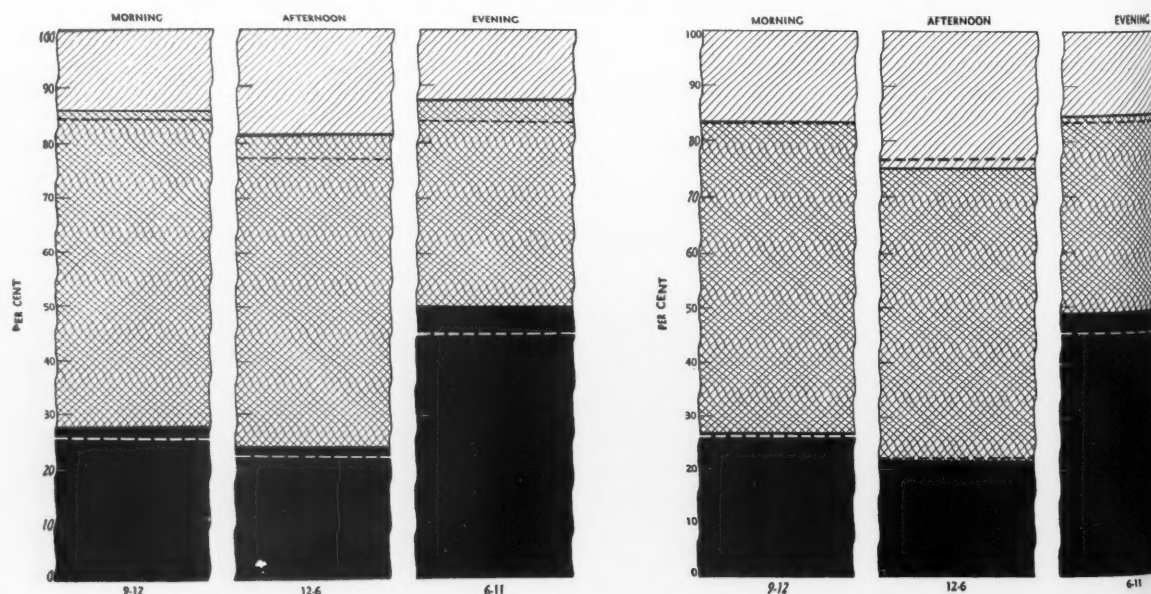
What most of the new dramatic programs were is not hard to guess. In a single week in 1940 three stations serving the same area broadcast 315 episodes of 75 different serials, "soap operas" as they are known in the industry.⁵ The term is less one of derision than affection. For unsophisticated though they may seem, they pull tremendous audiences, they sell goods, and provide very comfortable livings for those who can write and play in them.

Since 1935, another survey reports, the number of children's programs have been almost cut in half. They seem more adult, less unreal. Partly this may be attributable to a section of the National Association of Broadcasters Code (1938) which proscribed overstimulating material, as countless women's clubs and parents' associations had urged. Partly it may be the preference of children themselves as a recent survey (conducted by a parents' association) would suggest.

Whether it is really so that children prefer a milder story diet, the advertiser does not forget that mothers are very much to be reckoned with. Indeed advertisers do not forget mothers

⁵ Bartlett, Kenneth G., *The Annals*, American Academy of Political and Social Science, January 1941.

URBAN FAMILIES AVAILABLE AND LISTENING DURING AN AVERAGE HALF-HOUR ON WEEKDAYS



WINTER—Sometime during each day some 88 per cent listen

SPRING—Sometime during each day some 87 per cent listen



CHARLES PHELPS CUSHING

Even the obscurest of men may know the thrill of being broadcast, on a quiz program or at least as a name in some "dawn patrol's" list of birthday greetings. At Brooklyn Technical High School, students have their own station, WNYE, and their short-wave dramas are sometimes picked up for rebroadcast over the New York City station, WNYC.

enough, to judge by one of the broadcasting company's policy handbooks:

"It is consistent that fair play and considerate behavior be reflected through the commercial copy as in the script itself. Advice 'to be sure to tell mother' or 'ask mother to buy' must be limited to twice in a program."⁶

⁶ Broadcasting in the Public Interest, National Broadcasting Company, 1939.

Children's programs possibly to the contrary, it can be presumed that what the radio audience likes it gets. The two necessary premises are (1) that broadcasters want to give the public what it wants and (2) that they know what the public wants. The advertiser's stake in the first premise is clear. The radio station's concern, in its sustaining programs, is very little less so.

There is some evidence, to be sure, that advertisers prefer variety shows and dramas, that they eschew classical music and talks, which have to be aired at station expense. Still, the radio station's effort to find favor for its programs is nearly as keen as the advertiser's, for a station typically builds shows hoping to gain sponsors for them when they are established. Furthermore, a station sells an advertiser not alone a block of time, but with it a carryover audience.

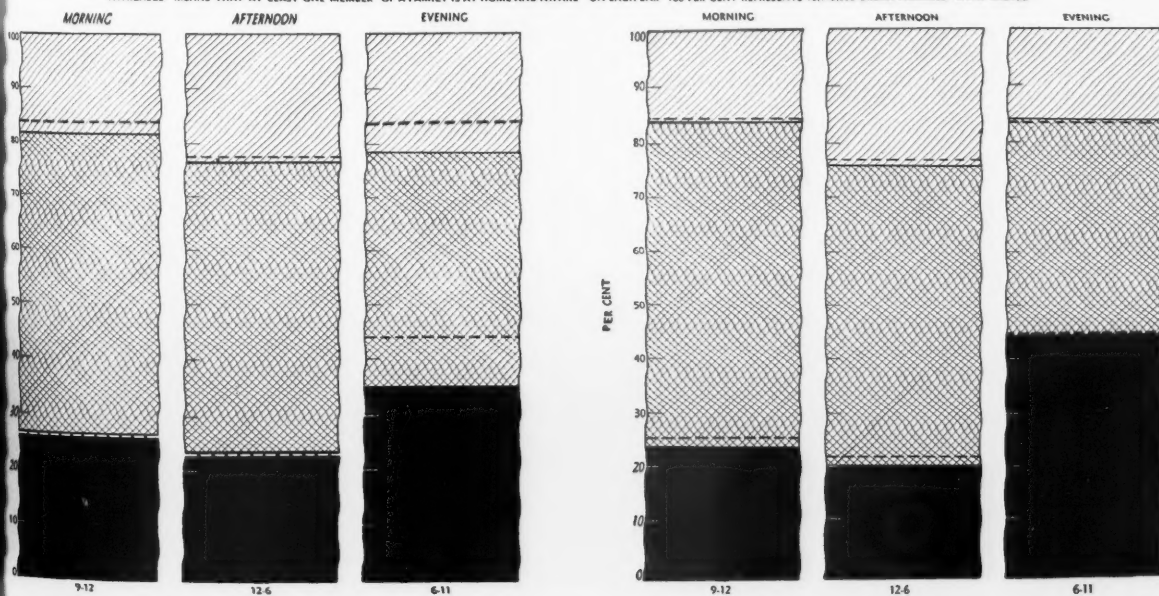
The second premise, that broadcasters know what the public like, is never certain, but over the past several years, through listener research, it has become more so. The incomplete but shorthand reference to this research is "Hooper" or "Crossley." To ask a sponsor his Hooper or Crossley rating can be as indiscreet as asking him his age, though the bias of wishful-thinking runs in the opposite direction. A Hooper or Crossley rating of 20, for example, signifies that 20 per cent of the homes comprising the sample were listening to the program. The samples used by the two services are quite different, however. The Hooper service uses a sample of all radio homes, whereas Crossley uses a sample of homes in which some one is present when the interviewer telephones.

LISTENING

AVAILABLE*

ANNUAL AVERAGES

*"AVAILABLE" MEANS THAT AT LEAST ONE MEMBER OF A FAMILY IS AT HOME AND AWAKE ON EACH BAR 100 PER CENT REPRESENTS 18,113,000 URBAN FAMILIES WITH RADIOS



SUMMER—Sometime during each day some 79 per cent listen

FALL—Sometime during each day some 83 per cent listen

Compiled by C. E. Hooper, Inc., Hooper ratings are based on telephone calls, following the "coincidental" technique; calls are made while the program is actually being broadcast. Monthly reports are sold to advertising agencies, advertisers, and broadcasters. Crossley ratings are so called because Crossley, Inc., also a private research organization, does the field work for the Co-operative Analysis of Broadcasting, as it has since 1930. It, too, uses the telephone, but follows the "day-part recall" method; listeners are asked what programs they have heard in the past two or three hours. The CAB is a mutual organization whose subscribers are radio advertisers, agencies, and networks,—in general the same group which subscribes to the Hooper service.

Both the Hooper and Crossley services are quick to acknowledge the limited usefulness of simple program ratings, more properly applied to determining trends than to measuring number of homes listening. Ratings, they maintain, are only a beginning, basically a quantitative beginning, which time-buyers must supplement with measurements and appraisals of qualitative elements—age, sex, income classification, season, and so forth. Not infrequently a change in a program's rating will reflect not a change in its popularity, but rather the effect of changes in network competition, time of broadcast, preceding and following programs, and similar factors.

Ranking Programs

But though they are merely a beginning, simple ratings—because they are simple—continue to be the most often cited. In December 1940 the Crossley top ranking program was *Jack Benny*. The *Chase & Sanborn* program, which a year before had been in first place, had changed from an hour to a half-hour show and dropped to second place. The remaining eight in the first ten were, in order, *Fibber McGee and Molly*, *Lux Radio Theater*, *Bob Hope*, *The Aldrich Family* (40th place a year earlier), *Kate Smith*, *Major Bowes* (sixth

year among the leaders), *Kay Kyser*, and *One Man's Family*.

Of the first ten programs at the end of 1940 only three were new to this eminence. The ranking in December 1939 included five programs which had not been among the first ten in December 1938.

Present Trends

Several trends evident in 1939 in sponsored evening network programs continued in 1940, according to Crossley reports. The amount of listening increased. Many leading programs were cut in half. More good time was available. Accordingly there was a larger number of well-rated shows.

The hunger for news continued in 1940. In December 1939 the average rating of four sponsored evening network news programs was 9.6. A year later the average figure was the same for seven such programs. There is considerable evidence, CAB reports, that the heightened interest in news programs accounted for many mentions for programs immediately preceding or following them. Late in February this year the Mutual Broadcasting System inaugurated a new policy of broadcasting news, either in five or fifteen minute periods, every hour of the day from 10 A.M. to 6 P.M.

How accurate can program ratings based on telephone calls be? The objection that telephone surveys reach an undue proportion of persons in upper income groups is met by distributing calls, so far as possible, over several income classes in accordance with the distribution of radio set ownership by income classes. But has a reported "listener" heard the whole program? Has he reported it accurately? Did he hear the commercial, or did he tune out? Did he come in before the beginning, at the beginning, or after the beginning? What is the program's audience turnover? Did listeners like some parts of the program, dislike others?

These are questions which can be determined better by the "audimeter";

so say its developers, another research organization, the A. C. Nielsen Company. The audimeter is a compact graphic recording instrument which attaches to a radio and which records on a moving tape both when the radio is in operation and what station it is tuned to, minute by minute. (The Hooper service maintains that its five-minute breakdowns also demonstrate a program's "listening pattern." Moreover, there is another mechanical recorder, developed by the Radio-Graph Corporation.)

For the past two and a half years, Nielsen audimeters have been in operation in a cross-section of Midwestern homes. Recently purchased, 800 more will bring the sample to 1,000. The audimeters go into the homes of hand-picked representative listeners, who thus far seem to have been eager to cooperate in keeping their sets' diaries.

"Ah," say the telephoners, "very good, but just because the set is on at a certain time can you say that anyone is listening to it?" "It appears," comes the reply, "that 56 per cent of the audimeter-tested radios switch stations, on the average, more frequently than every fifteen minutes; another 19 per cent of the listening periods are between 15 and 30 minutes. Do you believe in ghosts?" This, in turn, provokes the rebuttal that ghosts or not, there is always a "very substantial" percentage of radios which change stations "most infrequently." And so it goes.

In the "Public Interest"

Whatever the merits of competing types of radio research, there is still another force at work to speed the efficiency of all of them. Not only do broadcasting stations need to know listener preferences that they may find sponsors for sustaining shows, and may build for-better-or-worse continuing audiences. Equally necessary is it for them to know, in order that they may fulfill a public obligation. It has been succinctly explained by the president of the National Association of Broadcasters, Neville Miller:



PHILIPS CUSHING

In a split second radio establishes contact with the farm family and city folks, to be by turns missionary, minute man, or medicine man, the fervor of a Thomas Paine or the pathos of a Dickens serving to welcome sneezeless soap powder or vitamin-needed bread in millions of homes.



LOWAY

"The peculiarities of natural law as now revealed place definite restrictions on the number of radio facilities which are available; the use of one frequency has an effect on the use of another, and vice versa. It is doubtful, furthermore, whether the impending multiplication of usable frequencies (through the development of frequency modulation) will measurably lessen the need for licensing or for technical control by the licensing authority, the Federal Communications Commission. Since, therefore, the broadcaster can secure no vested right in his radio frequency, and since these frequencies belong to the American public as a whole, his right to use them for private gain co-extends only with his ability to serve 'public interest.' He has no moral or legal right to use them to suit his own brand of political, religious, or social belief to the exclusion of all others, as have the publisher and the producer of motion pictures. The basis of the American system of broadcasting is not the right of an individual to be heard, but the right of the public to hear."⁷

Congressional recognition of this right has had a chain of consequences, all significant to the radio advertiser.

A Radio Act authorizes the Federal Communications Commission to grant and withhold licenses, thus to determine in any area the number and power of stations, and indirectly to determine the intensity of competition of stations for advertisers and of advertisers for listeners. At the beginning of this year there were 882 standard (AM) commercial broadcasting stations and 40 authorized frequency-modulation (FM) stations. Of the 882, NBC network stations numbered 223; Columbia Broadcasting System stations, 123; Mutual Broadcasting System stations, 168.⁸

The Radio Act further declares that: (1) there shall be no obscene, indecent, or profane language; (2) no lottery or lottery information is permitted; (3) candidates of recognized political par-

⁷ *The Annals*, January 1941.

⁸ See Footnote 1.



MUTUAL BROADCASTING SYSTEM PHOTOGRAPH

In this room turn the phonographs which radio for a while replaced: recordings made, the breathed words of Napoleon in a terrible pattern and of new Patrick Henrys whip the ears that we lend them.

ties for the same office must be given equal opportunity to reach the radio audience; (4) commercially sponsored programs must be announced as such; and (5) there shall be no unauthorized rebroadcasting.

More elaborate restrictions have come from the broadcasters themselves as they have sought to interpret their vague mandate. Minimum standards which seem advisable for their own survival they have erected into the National Association of Broadcasters Code. It urges that news broadcasts be presented without editorial bias, that children's programs meet certain re-

quired. "Murder or suicide is definitely discouraged at all times, and the methods employed must not be described in detail." "False and misleading statements and all other forms of misrepresentation must be avoided." "Commercial programs shall not refer to any competitor, or his products, directly or indirectly."

Still other network policies limit program material duplication, restrict the use of testimonials, and regulate contests and premium offers. Special policies apply to medical accounts and to news and children's programs.

All this in the interest of the public's

quirements, that limitations be imposed on the length of commercial advertising copy, that certain classes of advertising are unacceptable for radio broadcasting, that standards of good taste and business and social ethics must apply at all times.

The provisions of the Code, in turn, have been further elaborated in the policies and requirements set out for advertisers by the major networks. "Emphasis on insobriety is not

right to hear what he, collectively, wants to hear—and in the interest of the broadcasters' survival. "The wise broadcaster," William S. Paley, president of CBS, has written, "never forgets that it is much easier to turn the dial than to stop a subscription."⁹

So it is that the advertiser too, though he pays the piper, is careful how he calls the tune. Not long ago a study of listener attitudes toward radio advertising asked three questions: (1) "How do you like it?" (2) "How much time does it take?" (3) "How would you like to pay for it?"¹⁰

When the questions were asked in that order the replies were typically (1) about neutral, (2) an overestimate, (3) wouldn't like to.

Half of the listeners were asked the third question first. Changing the order of questions in this way influenced markedly and favorably the answers to the question: "How do you like it?"

Frequent repetition has elevated one commonplace observation about radio advertising to the status of a dogma: "Radio advertising is like billboard advertising." It follows that a prime object is to get the name across. Very likely it is out of this fixation that commercials have evolved which most offend a listener's patience, those whose object it evidently is to determine how many times it is possible to mention a trade name in a single running an-

⁹ See Footnote 7.
¹⁰ Sayre, Jeanette, *The Journal of Applied Psychology*, February 1930.

(Continued on page 49)

These are the practitioners of a new art, using sounds to draw a picture in the minds of distant people. Tramp of armies, clangor of ambulance, blast of bombs from a shot-filled bladder. And each listener visualizes with a personal emotion the army and the devastation which he dreads.

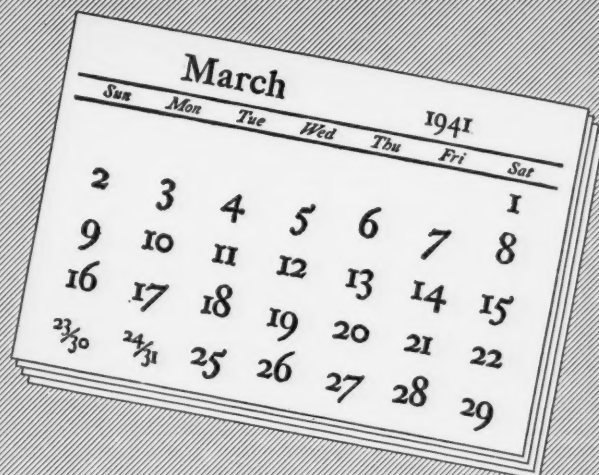


COLUMBIA BROADCASTING SYSTEM PHOTOGRAPH



PRESIDENT SIGNS THE LEND-LEASE BILL—PHOTOGRAPH BY HARRIS & EWING

BUSINESS DIARY



EVENT OF THE MONTH

President signs Lend-Lease bill, empowering him to procure and supply defense articles for nations whose survival he deems in the interest of national defense; \$7,000,000,000 appropriated for this purpose.

- 8 PATENT assigned to Haynes Stellite Company, Inc., for a high-speed cutting tool alloy said to go through steel at 200 surface feet a minute.
- PRESIDENT signs Lend-Lease bill which gives him vast power to manufacture or procure defense articles and to supply them to any government if he deems this in the interest of national defense.
- 11
- 15 LAST day for filing Federal Income Tax returns.
- 16 INVESTMENT banking group purchases American Viscose Corporation from the British Government.
- PRESIDENT establishes 11-man National Defense Mediation Board . . . Amalgamated Clothing Workers of America win \$18,000,000 (about 12 per cent) increase, effective May 19.
- 19
- GRAND COULEE DAM in Washington begins production of electric energy, generating 10,000 of its eventual 1,974,000 kilowatts. . . . Method patented for reducing moisture content of wheat and other grains, permitting their storage on farms after threshing. . . . Extreme shortages of seeds for spinach, cauliflower, some Danish cabbages, leeks, and onions.
- 22
- 24 VIOLENCE breaks out at opening of strike against Bethlehem Steel Corporation plant, Bethlehem, Pa.
- YUGOSLAVIAN GOVERNMENT signs the Tripartite Axis pact while peasants riot against Nazis. . . . CIO strikers battle police outside International Harvester plant, Chicago.
- 25
- NIPPONESE Foreign Minister Matsuoka arrives in Berlin after brief stopover with Stalin in Moscow. . . . Secretary of Navy Knox and OPM Director Knudsen
- 26

DURING THE MONTH

TNEC report submitted. . . . National Defense Mediation Board appointed. . . . U. S. Treasury Defense Savings Stamps announced. . . . Yugoslavian army coup. . . . British smash an Italian fleet.

- telegraph Allis-Chalmers Company to open Milwaukee plant where a ten-week strike is reportedly impeding production for 30 companies holding more than one-third of all U. S. defense contracts.
- By A SWIFT coup the Yugoslavian army ousts Regent Paul and places 17-year old King Peter on throne. . . . Ferro-tungsten, tungsten metal powder, and tungsten compounds join aluminum, magnesium, neoprene, and nickel on priorities list. Dealers in quicksilver warned by Government that prices are too high for demand. . . . President Roosevelt signs bill appropriating \$7,000,000,000 for Lend-Lease purposes.
- 27
- BRITISH Eastern Mediterranean fleet and Greek warships have decoyed an Italian fleet off base, sinking three heavy cruisers and two destroyers.
- 28
- STRIKE at International Harvester ends. . . . U. S. Coast Guard boards 65 Axis and Danish merchant vessels in U. S. ports to prevent sabotage. . . . Tungsten ore discovered in Valley County, Idaho.
- 30
- BITUMINOUS coal miners stop work as unrenewed union contract expires. . . . Police in six-ton armored car use tear gas bombs to quell 3,000 strikers at Allis-Chalmers plant. . . . TNEC submits its report to Congress, recommending: that corporations receive national charters; repeal of Miller-Tydings enabling act; abolition of basing point systems for calculating prices; reform of patent laws; control of mergers; improvement of State regulation of insurance companies. . . . U. S. Supreme Court finds Federal Government is not a "person" under the Sherman Anti-Trust Act and therefore is not entitled to triple damages in case charging collusive bidding.
- 31

[27]

THE REGIONAL TRADE BAROMETERS

Trends in consumer purchasing in the 29 barometer regions are summarized on page 33. Charts on this page and the three following left-hand pages compare the index for each region with the index for the United States since 1939. The accompanying paragraphs give more recent detail about regional trade conditions.

Charts of the indexes since January 1929, appeared in the March 1941, number and will be published again in September. Additional information about the barometers and about their especial usefulness in regional sales quota work, back figures and data on regional boundaries are available for users of the indexes.

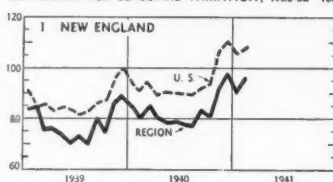
1. NEW ENGLAND

FEB., 97.0 JAN., 91.0 FEB. 1940, 80.2

UNADJUSTED: FEB., 82.0; JAN., 82.4

MARCH—Percentage retail trade increases over previous March: Bangor 0, Portland 5, Boston 10, New Bedford 9, Springfield 8, Worcester 4, Providence 9, Hartford 10, New Haven 15. Wholesale trade increases: Portland 2, Boston 8, Springfield 10. Payrolls and production well above a year ago, generally up in month. Heavy industry, textiles, and building very active. Plant additions in aircraft and tool lines. Shoe output at seasonal peak. Massachusetts and Rhode Island employment at 12-year high. Collections fair to good. APRIL—Increased activity in heavy industry. Shoe output off slightly. Pre-Easter department store sales up 30% from 1940.

CORRECTED FOR SEASONAL VARIATION; 1928-32 100

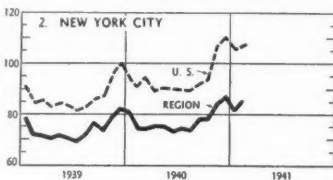


2. NEW YORK CITY

FEB., 85.8 JAN., 82.1 FEB. 1940, 74.8

UNADJUSTED: FEB., 80.9; JAN., 70.2

MARCH—Percentage retail trade increases over previous March: Bridgeport 15, New York City department store sales 2, hotel sales 6. Payrolls and production better than last year and last month. Manufacturers' sales of rayon yarn and fabrics at record, moderately increased in knit goods, sportswear, and dresses. Sales of clothing, gloves, and caps strengthened, partially due to Government contracts. Aircraft industry near capacity. Hardware, electrical supply, and radio manufacturers very active; orders large. Collections generally favorable. APRIL—Pre-Easter department store sales up 25% from 1940; food sales up 10%.

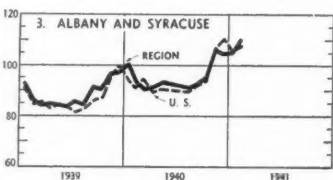


3. ALBANY AND SYRACUSE

FEB., 110.3 JAN., 105.8 FEB. 1940, 93.8

UNADJUSTED: FEB., 107.1; JAN., 91.9

MARCH—Percentage retail trade increases over previous March: Albany 2, Binghamton 12, Utica 8, Syracuse 12. Wholesale trade increases: Albany 12, Syracuse 7. Some farm acreage reductions near Syracuse due to low labor supply. Payrolls and production better than last year, payrolls generally up in month. Leading metal and machine plants at capacity; substantial gains in textile, steel, electrical, optical lines. Binghamton shoe factories on 5-day week. Most Syracuse plants working overtime. Collections steady to better than last year. APRIL—Lumber industry more active. Binghamton pre-Easter trade up 10 to 20% from Easter 1940.

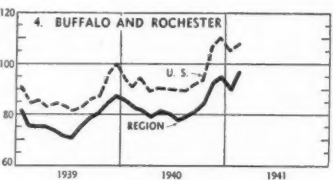


4. BUFFALO AND ROCHESTER

FEB., 97.9 JAN., 91.1 FEB. 1940, 82.8

UNADJUSTED: FEB., 91.4; JAN., 79.0

MARCH—Percentage retail trade increases over previous March: Buffalo 12, Elmira 7, Rochester 10. Buffalo wholesale trade up 8%. Farm income higher than last year. Payrolls and production well above last year, up in month. Most machinery, electrical apparatus, and railroad equipment industries in Rochester working overtime. Employment lower in food and printing lines, again increased in metals, machinery, and shoes. Value of building permits up 48% from 1940. Collections generally fair. APRIL—Pre-Easter trade best since 1929 in Buffalo; payrolls highest since 1920. Navigation on Great Lakes unusually active.

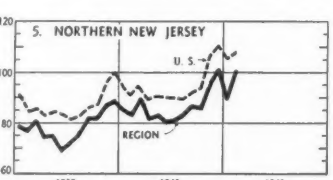


5. NORTHERN NEW JERSEY

FEB., 100.1 JAN., 89.7 FEB. 1940, 82.9

UNADJUSTED: FEB., 95.1; JAN., 76.1

MARCH—Newark retail trade 12% above like month last year, wholesale trade up 15%. Payrolls and production well above a year ago and up in month. Manufacturers in all defense lines operating at capacity. Paterson aircraft industry working 24-hour day. Bank clearings 12% above 1940 for Northern New Jersey as a whole; up 11% in Newark. Building permit value in Newark and Jersey City up 75% from last year. Collections better than last year and last month in wholesaling and manufacturing, steady in retailing. APRIL—Pre-Easter department store sales up about 35% from 1940. Sales of paint manufacturers up 15% from 1940, 12% in month.

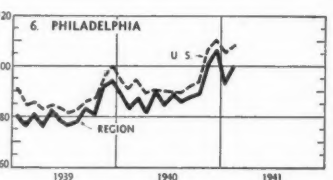


6. PHILADELPHIA

FEB., 100.0 JAN., 93.9* FEB. 1940, 83.4

UNADJUSTED: FEB., 91.2; JAN., 81.3*

MARCH—Percentage retail trade increases over previous March: Trenton-Wilkes-Barre 2, Harrisburg 7, Wilmington 0; decreases: Allentown 7, Philadelphia-Scranton 5. Philadelphia wholesale trade up 30%. Payrolls and production well above last year. Heavy industries and garment manufacturers very active. Output of rubber goods gained; pottery factories near capacity in Trenton. Coal sales brisk. Skilled laborers leaving Scranton. Collections vary, poorer than last year in Scranton. APRIL—Output increased in durable goods, off seasonally in shoes. Additional Army orders for textiles. Philadelphia pre-Easter trade 25% above Easter last year. *Revised.

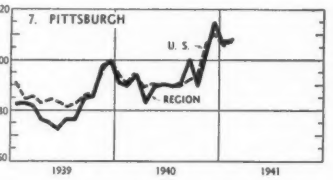


7. PITTSBURGH

FEB., 108.1 JAN., 107.5 FEB. 1940, 90.7

UNADJUSTED: FEB., 104.0; JAN., 90.5

MARCH—Percentage retail trade changes from previous March: Erie +14, Pittsburgh-Youngstown +5, Huntington-Charleston -5. Wholesale changes: Erie-Pittsburgh +20, Charleston -10. Payrolls and production steady to better



than a year ago. Steel mill output at record high; Pittsburgh operating rate exceeded 100% of capacity. Electrical and machinery plants working full time. Bee-hive coke shipments heavy. Collections steady to improved over last year. APRIL—Coal mining suspended because of strike; steel output off slightly. Construction active in Erie. Pre-Easter retail trade 10 to 25% above 1940 with largest gains in Pittsburgh.

(Continued directly opposite)



TUG IN NORTH RIVER—PHOTOGRAPH BY LAWRENCE D. THORNTON

Department Store Sales

Federal Reserve Board Adjusted Index
1923-1925 = 100

	1938	1939	1940	1941
January	90	88	92	101
February	88	88	90	103
March	86	88	89	103
April	83	88	89	
May	80	87	89	
June	82	86	91	
July	83	87	94	
August	83	88	98	
September	85	90	97	
October	86	92	94	
November	87	93	100	
December	88	95	101	

Rapid turnover and the increased difficulty of placing orders in excess of current needs were restricting but not yet halting the expansion of inventories. Largest increases centered in manufacturing lines, where the overall gain ranged 10 to 15 per cent above the 1940 level. For wholesalers the increase was about 10 per cent (end of March). The FRB adjusted index of department store stocks, despite the recent acceleration of forward buying, was still only 74 (1923-1925 = 100) compared with 70 a year ago.

Easter turned out to be another Christmas for retailers, with initial reports indicating the biggest Spring season since 1930. Gains in sales over a year ago were most spectacular in the first two weeks of April, when comparisons were affected by the changed date of the holiday, but the margin of improvement held up well right through the end of the month. Increases were substantial in grocery and apparel lines, as well as in automobiles and other durable goods where anticipatory purchasing was said to be a factor.

The "buying spree" in retail and primary markets continued to contrast sharply with the careful inaction of financial markets. The nine-month

Industrial Production

Federal Reserve Board Adjusted Index
1935-1939 = 100

	1938	1939	1940	1941
January	86	102	122	139
February	84	101	116	141
March	84	101	113	143
April	82	97	111	
May	80	97	115	
June	81	102	121	
July	86	104	121	
August	90	104	121	
September	92	113	125	
October	95	121	129	
November	100	124	132	
December	101	126	138	

THE TREND OF BUSINESS

PRODUCTION . . . PRICES . . . TRADE . . . FINANCE

The business uptrend set in motion by the defense effort is now propelled forward by a growing volume of private and public expenditures. Influences of a temporary nature turned the production trend in April but order backlogs continued to grow. Easter retail trade reached the best level since 1930. Commodity prices steadied at recent highs. In contrast, stock trading declined and prices were lowest since last June.

BUSINESS activity in April was featured by a sharp expansion of retail trade and by the moderation of the rise in wholesale prices, along with developments in the field of price control by the Government. Defense continued to dominate the industrial scene, as expenditures rose further to approximate \$800,000,000 in April.

For the first time in eight months industrial production, after adjustment for usual seasonal trends, failed to continue its advance. Order placing showed some moderate decline in such industries as lumber and textiles, but the chief factors responsible for the slackening of the production uptrend seemed to be of a temporary nature.

Labor disputes cut output in the automobile and bituminous coal industries and by midmonth a coal shortage was also slowing operations in some heavy goods lines, particularly steel.

Key industries had not yet caught up with the flow of new business in many instances and available reports suggested that backlogs were still growing, although at a less rapid rate than a few months ago. Buying policies continued to stress long-term coverage: in the Chicago and Detroit areas over 50 per cent of purchasing agents were buying six months or longer. (In New England and on the West Coast the proportion was smaller—about 25 per cent).

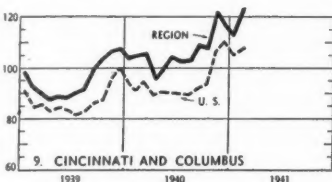
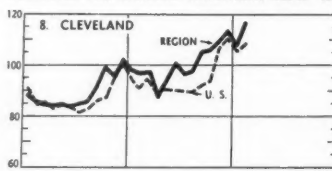
8. CLEVELAND

FEB., 116.9 JAN., 108.4 FEB. 1940, 97.3

UNADJUSTED: FEB., 105.2; JAN., 94.3

MARCH—Percentage retail trade increases over previous March: Cleveland 10, Akron 20, Canton 17, Toledo 2, Lima 5. Wholesale trade increases: Cleveland 15, Akron 8, Toledo 10. Payrolls and production well above a year ago, generally up in month. Cleveland employment at new peak; steel rate advanced to 99% of capacity. Machine tools at capacity. Substantial Government ship-building contracts. Rubber factories very active. Value of building permits up 50% from last year. Collections better than 1940. APRIL—Employment rising. Navigation open on Great Lakes. Pre-Easter department store sales up 20 to 30% over 1940 in leading cities.

CORRECTED FOR SEASONAL VARIATION: 1928-32 100



9. CINCINNATI AND COLUMBUS

FEB., 123.1 JAN., 113.1 FEB. 1940, 105.2

UNADJUSTED: FEB., 109.6; JAN., 99.5

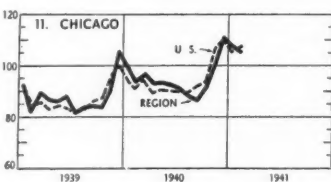
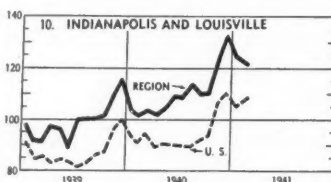
MARCH—Percentage retail trade increases over previous March: Cincinnati 10, Dayton 21, Springfield 15, Columbus 1, Zanesville 5; Lexington off 7. Wholesale trade increases: Cincinnati 10, Columbus 20. Dairy and poultry production and prices steady. Payrolls and production generally much better than last year. Vastly increased production facilities boosted employment in Cincinnati defense industries. Building permit value 68% ahead of 1940 in leading cities. Some 3,000 workers have left Lexington area for defense jobs. Collections fair to good. APRIL—Employment rising. Pre-Easter department store sales up 30 to 50% from 1940 in Columbus and Cincinnati.

10. INDIANAPOLIS AND LOUISVILLE

FEB., 121.4 JAN., 125.2 FEB. 1940, 101.9

UNADJUSTED: FEB., 112.5; JAN., 111.2

MARCH—Percentage retail trade increases over previous March: Louisville 20, Evansville 5, Indianapolis 15, Terre Haute 7, Fort Wayne 17. Wholesale trade increases: Louisville 10, Indianapolis 15. Winter wheat hurt by lack of rain. Livestock prices steady in month. Payrolls and production above last year, steady to up in month. Metal furniture production 10% and more above 1940. Electrical equipment, machinery, and coal output at high level. Construction very active. Collections steady with last year. APRIL—Coal mines shut down by strike. Pre-Easter department store sales up 45% over 1940 in Indianapolis, up 35% in Louisville.



11. CHICAGO

FEB., 105.8 JAN., 107.1* FEB. 1940, 94.0

UNADJUSTED: FEB., 100.2; JAN., 93.9*

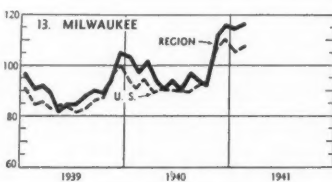
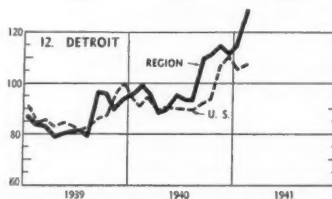
MARCH—Percentage retail trade increases over previous March: Chicago 4, Rockford 18, Peoria 10, South Bend 14, Springfield 1. Chicago wholesale trade up 2%. Ample soil moisture for planting. Payrolls and production well above a year ago. Chicago steel rate at 100% of capacity. Machine tool, tractor, and earth-moving machinery plants at capacity. Rockford employment 30% above 1929 peak. Skilled labor shortages in Chicago. Value of building permits up sharply in Rockford and South Bend. Collections vary. APRIL—Chicago steel rate dropped to 96% of capacity, affected by coal strike; pre-Easter department store sales up 18% from 1940. * Revised.

12. DETROIT

FEB., 128.9 JAN., 114.0* FEB. 1940, 99.6

UNADJUSTED: FEB., 122.5; JAN., 101.5*

MARCH—Percentage retail trade increases over previous March: Detroit 12, Grand Rapids 15, Saginaw 10. Wholesale trade increases: Detroit 14, Grand Rapids 12. Hothouse garden truck in good demand. Payrolls and production well above a year ago. Automobile output off from February but 23% ahead of last year. Automotive, machine plants, and foundries increasing production. Metal trades at capacity, orders for furniture 25% above last year in Grand Rapids. Collections steady to better than 1940. APRIL—Automobile output dropped sharply; slightly below 1940. Pre-Easter department store sales up about 30% from last year in Detroit. * Revised.



13. MILWAUKEE

FEB., 116.6 JAN., 115.7* FEB. 1940, 97.9

UNADJUSTED: FEB., 107.9; JAN., 97.9*

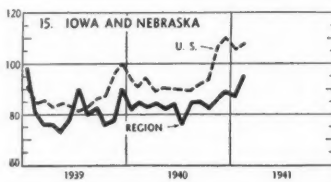
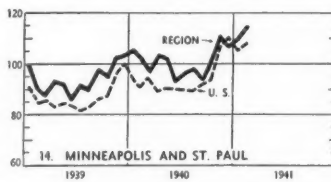
MARCH—Percentage retail trade changes from previous March: Milwaukee +6, Green Bay -3. Milwaukee wholesale trade up 15%. Payrolls and production well above a year ago, up in the month except for large machine plant employing 7,000 workers and closed since end of January. Other heavy industry operating at a high level. Milwaukee building permits one and one-half times last year's value. Green Bay benefiting indirectly from defense program with output in most lines up substantially. Collections steady to better than 1940. APRIL—Machine plant strike settled. Pre-Easter department store sales up 15 to 20% from 1940 in Milwaukee. * Revised.

14. MINNEAPOLIS AND ST. PAUL

FEB., 114.7 JAN., 110.1 FEB. 1940, 101.9

UNADJUSTED: FEB., 98.2; JAN., 92.8

MARCH—Percentage retail trade increases over previous March: Minneapolis-Butte 3, St. Paul 6, La Crosse 3, Sioux Falls 10, Great Falls 5; decreases: Duluth 5, Fargo 3, Billings 2. Wholesale trade increases: Duluth 8, Minneapolis 3, Great Falls 5. Farm prices up moderately. Ample moisture in eastern section; less in Montana. Payrolls and production generally above last year. Output of flour, linseed oil, feed, and farm implements above 1940. Automotive, aircraft, trailer, steel, and garment plants very active. Great Falls smelters at capacity; silver and lead mining 20% above 1940. Collections vary. APRIL—St. Paul pre-Easter trade up 12% from 1940.



15. IOWA AND NEBRASKA

FEB., 95.9 JAN., 87.7 FEB. 1940, 84.5

UNADJUSTED: FEB., 85.5; JAN., 85.8

MARCH—Percentage retail trade changes from previous March: Burlington +20, Cedar Rapids-Dubuque +5, Davenport +15, Des Moines +7, Waterloo 0, Sioux City -5, Lincoln -3, Omaha -2. Wholesale trade increases: Sioux City-Des Moines 7, Omaha 5. Moisture conditions spotty. Winter wheat hurt by freezes. Farm prices well above 1940. Payrolls and production generally above a year ago. Additional defense orders in Des Moines and Cedar Rapids. Construction of shell-loading plant stimulates Burlington trade. Dubuque foundry output higher due to defense work. Collections vary. APRIL—Bank clearings up 11% in Cedar Rapids, 3% in Des Moines.

Wholesale Commodity Prices

U.S.B.L.S. Index—1926 = 100

Week	Jan. 1941	Feb. 1941	Mar. 1941	Apr. 1941
I	80.2	80.6	80.5	82.2
II	80.3	80.5	80.6	82.9
III	80.6	80.5	80.9	83.0
IV	80.8	80.4	81.6	
V			82.0	

rise in business borrowings had brought such loans of member banks to \$5,532,000,000 by April 30, a rise of 25 per cent over a year ago. But loans to brokers and dealers for securities on the same date were only \$465,000,000, a drop of 53 per cent below last year. Average daily transactions on the New York stock exchange were 447,430 shares in April, fewest for the month in twenty-three years. The industrial stock price average (Dow-Jones) in the fourth week of the month stood at 116.47, compared with 148.30 a year ago.

Industrial activity: Industry's statistical record for March again furnished a number of new all-time highs in production. The FRB over-all measure of output pushed ahead to 143 (1935-1939 = 100) which represented a gain of 2 points in the month and of 32 points or 29 per cent over the 1940 low last April. The peak levels reached by this index in previous periods of prosperity were 114 in 1929 and 121 in 1937.

Moreover, there were indications that as industry worked deeper into defense the FRB and other general production indexes were tending to underestimate the extent of the rise. Government production at arsenals, for example, is not directly included in the FRB index. Automobile production is represented by unit output of cars and trucks—and the automobile industry, with over \$1,500,000,000 in orders for war equipment, already plans a 20 per cent cut in unit passenger car output in order to handle the heavy demands of the defense program. Two industries on which the pull of the defense boom is especially strong, aircraft and shipbuilding, have less than 1 per cent

representation in the total FRB index.

First-quarter production figures of major industries set all-time or at least decade records in most instances. Output of steel, amounting to 20,339,869 net tons, was at a new record high, as were automobile output of 1,498,604 units and cotton consumption of 2,491,079 bales. Heavy construction awards (*Engineering News Record*) reached \$1,461,248,000, largest for any first quarter in history. Tire shipments, estimated at 15,000,000 units and railroad equipment business including 27,000 freight cars, were the best totals since 1929.

Consumer income: With an increase in factory employment of almost twice the usual seasonal amount, total non-agricultural employment in March reached 37,218,000, largest for any

the highest level reached in any month since April 1930. Unchanged at 103 (1923-1925 = 100), the FRB adjusted index of department store sales was also at the best level since the Spring of 1930. The index of grocery chain-store sales reached a new record high of 126.1 (1929-1931 = 100). Automobile sales of 525,798 units were highest for March since 1929.

Prices: After a fairly substantial rise in March, sensitive wholesale prices levelled off in April. The index of wholesale food prices gained 8 cents to \$2.80 on top of a 17c. advance in March. The all-commodity index of the USBLS moved ahead 1.5 points in March and 1.0 point in April. Both of these price indexes stood at their war-time highs.

Steadiness in stock prices in March turned into a declining trend in the following weeks. At the end of April the industrial average (Dow-Jones) was 116.47, approximately 33 points below a year ago and lowest since last June.

Banking and finance: An increased demand for both credit and cash was evident in banking figures, which showed money in circulation at a new peak of \$9,071,000,000 (April 30), demand deposits of member banks at a high of \$23,762,000,000 (April 23), and commercial loans at a record \$5,532,000,000 (April 30).

Corporate issues for new capital increased in March for the first time in four months, but at \$86,034,000 were still well below the level at the same period in 1937. Total corporate issues of \$202,972,000 compared with \$248,562,000 in February.

Factory Payrolls

U.S.B.L.S. Index
1923-1925 = 100

	1938	1939	1940	1941
January	75.4	84.7	99.8	120.7
February	77.7	87.1	99.3	126.9
March	77.8	88.8	99.8	131.0
April	75.2	86.8	97.9	
May	73.6	86.3	97.8	
June	71.6	87.9	99.5	
July	71.7	85.8	98.2	
August	77.9	91.2	105.5	
September	82.3	95.9	111.6	
October	85.0	103.2	116.2	
November	84.3	103.2	116.4	
December	88.1	105.4	122.4	

March on record. Payrolls again rose more sharply than employment: the USBLS payrolls index was 131.0 (1923-1925 = 100) while the employment figure was 119.9, respectively 31.3 and 14.8 per cent above a year ago.

A further advance of 0.5 point in the index of total income payments brought it to 97.8 (1929 = 100), compared with 88.4 in March a year ago and with the all-time high of 102.2 in August 1929. The NICB index of living costs was up fractionally to 86.3 (1923 = 100), less than 2 points above last March.

Consumer spending: The continuation of better than seasonal gains in consumer buying sent the DUN'S REVIEW seasonally adjusted index to 112.7 (1928-1932 = 100) in March; this was

Industrial Stock Prices

Dow-Jones Index (Weekly Average)

Week	Jan. 1941	Feb. 1941	Mar. 1941	Apr. 1941
I	131.43	125.85	122.10	123.84
II	133.22	123.87	121.17	120.59
III	131.07	120.82	123.14	117.78
IV	128.65	119.27	123.15	116.47
V			122.71	

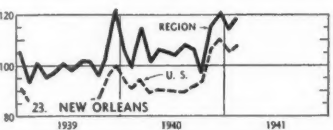
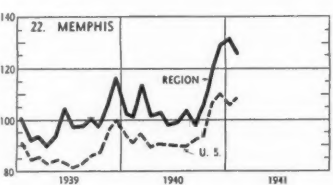
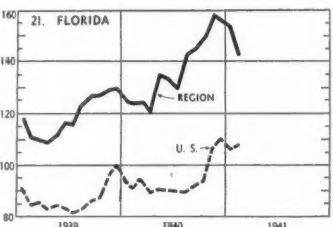
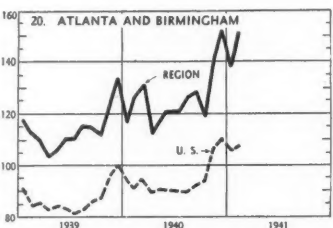
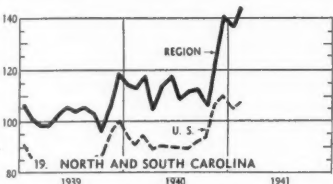
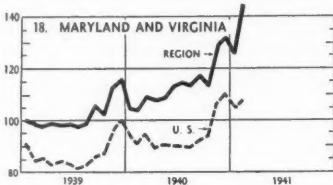
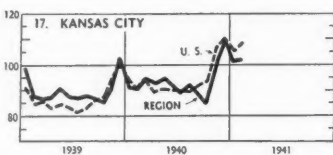
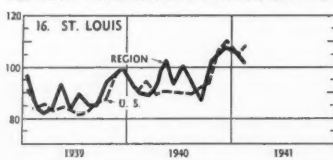
16. ST. LOUIS

FEB., 101.4 JAN., 106.1 FEB. 1940, 89.6

UNADJUSTED: FEB., 98.9; JAN., 93.4

MARCH—Percentage retail trade changes from previous March: St. Louis —4, Springfield (Mo.) +8, Quincy —2. St. Louis wholesale trade up 5%. Some Winter wheat lost due to freezes. Considerable increase in oats acreage. Grain prices steady. Payrolls and production well above a year ago. St. Louis steel rate advanced to 99% of capacity. Electrical equipment, chemical, paper box industries very active. Shoe factories running full time. St. Louis building permit value for first quarter double last year and best since 1929. APRIL—Pre-Easter department store sales 10 to 15% above 1940 in St. Louis. Shoe output decline less than usual.

CORRECTED FOR SEASONAL VARIATION; 1928-32 100



18. MARYLAND AND VIRGINIA

FEB., 143.7 JAN., 126.2 FEB. 1940, 104.4

UNADJUSTED: FEB., 133.5; JAN., 108.7

MARCH—Percentage retail trade increases over previous March: Baltimore—Washington 12, Norfolk 25, Lynchburg 7, Roanoke 5, Bristol 0; Richmond off 5. Wholesale trade increases: Baltimore 5, Norfolk 15, Richmond 4. Crop growth somewhat slow, due to cool weather and light rainfall. Payrolls and production well above last year. Aircraft, steel, and textile plants operating at or near capacity. Shipyards continue to expand. Furniture and garment factories very active. New Army camp opened near Richmond. Collections fair to good. APRIL—Baltimore building expanding; pre-Easter department store sales up about 40% from 1940.

20. ATLANTA AND BIRMINGHAM

FEB., 151.9 JAN., 138.4 FEB. 1940, 128.1

UNADJUSTED: FEB., 139.0; JAN., 123.5

MARCH—Percentage retail trade increases over previous March: Atlanta 7, Augusta—Macon—Mobile 10, Columbus 20, Savannah—Birmingham 15, Knoxville 2, Nashville 17; decreases: Montgomery 3, Chattanooga 5. Wholesale trade increases: Atlanta 5, Birmingham—Nashville 10. Crop prospects good; peaches much better than last year. Payrolls and production generally above a year ago. Defense orders accelerating production. Textile, lumber, and building materials industries particularly active. Collections steady to better than last year. APRIL—Easter trade reported best since 1929 in Atlanta, near-record in Knoxville.

22. MEMPHIS

FEB., 125.4 JAN., 132.3 FEB. 1940, 100.6

UNADJUSTED: FEB., 114.6; JAN., 122.4

MARCH—Percentage retail trade increases over previous March: Memphis—Little Rock 10, Fort Smith 14. Memphis wholesale trade up 5%. Cotton prices firm. Spinach crop retarded somewhat by weather but prices satisfactory. Payrolls and production above last year. Manufacturers of furniture, glass, stoves, and allied lines working full time against substantial order backlogs. Chemical firms and aircraft parts maker opened plants in Memphis. Collections steady to better than last year. APRIL—Pre-Easter department store sales up 30 to 35% in Memphis, up 60% in Little Rock. Prospects good for fruit crops but moisture needed.

17. KANSAS CITY

FEB., 101.6 JAN., 101.1 FEB. 1940, 89.8

UNADJUSTED: FEB., 97.5; JAN., 87.2

MARCH—Percentage retail trade increases over previous March: St. Joseph 2, Topeka 5, Wichita 10, Oklahoma City 5, Tulsa 7; Kansas City off 5. Wholesale trade changes: Kansas City —5, Oklahoma City +5. Wheat crop prospects favorable; grain prices up in month. Payrolls and production steady to better than a year ago. Packing plants and drug manufacturers active. Wichita aircraft expansion about completed; employment expanding rapidly. Output of flour mills about 15% ahead of last year. Collections vary in different sections. APRIL—Pre-Easter department store sales up about 25% from 1940 in Kansas City; bank clearings up about 20%.

19. NORTH AND SOUTH CAROLINA

FEB., 142.9 JAN., 137.3 FEB. 1940, 113.3

UNADJUSTED: FEB., 123.3; JAN., 111.4

MARCH—Percentage retail trade increases over previous March: Asheville 15, Winston-Salem 4, Charlotte—Raleigh 5, Wilmington 16, Charleston 26, Columbia 41, Greenville 8. Wholesale trade increases: Wilmington 10, Charleston 15, Winston-Salem 8. Spring crops in good condition. Payrolls and production generally above last year. Textile mills active on defense orders. Charleston fertilizer shipments heavy; tourist trade excellent. Defense construction boosting trade in Charlotte, Wilmington, Charleston. Collections steady to better than 1940. APRIL—Wage increase for Durham textile workers. Charlotte Easter trade best in history.

21. FLORIDA

FEB., 141.6 JAN., 153.7 FEB. 1940, 124.1

UNADJUSTED: FEB., 173.3; JAN., 164.3

MARCH—Percentage retail trade increases over previous March: Jacksonville 2, Miami 15, Tampa 10. Wholesale trade increases: Jacksonville 9, Tampa 5. Citrus shipments decreased seasonally, prices off. Vegetable shipments picked up; prices firm. Jacksonville bank clearings largest for the month since 1926; cigar and lumber output steady, sales off somewhat. Lumber prices declined. Tampa cigar industry more active. Largest shipbuilding yards in the world to be built in Jacksonville. Collections steady to better than last year. APRIL—Heavy winds damaged citrus fruit. Pre-Easter department store sales reported up about 50% from 1940 in Tampa.

23. NEW ORLEANS

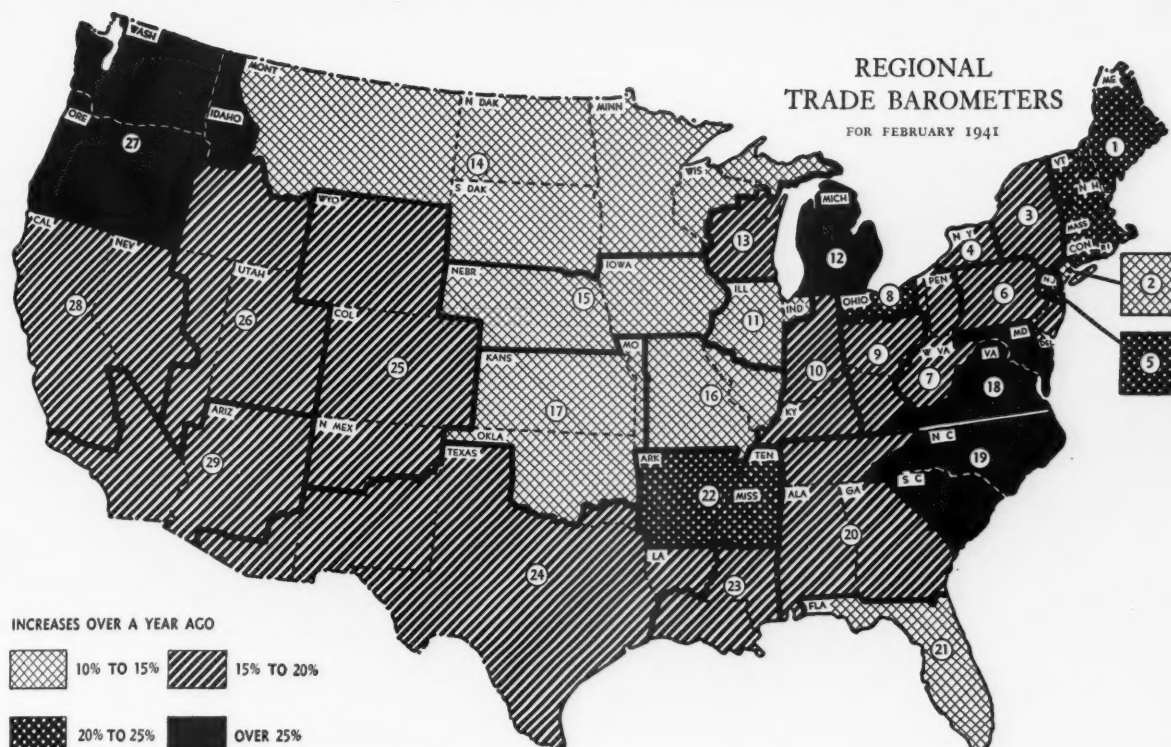
FEB., 118.0 JAN., 113.6 FEB. 1940, 99.8

UNADJUSTED: FEB., 114.0; JAN., 103.0

MARCH—Percentage retail trade increases over previous March: New Orleans 8, Jackson 5. New Orleans wholesale trade up 20%. Sharp trade gains in areas affected by defense projects offset somewhat by slower sales in other areas. Many new stores in New Orleans area. Cotton, corn, cane, and rice crops progressing well. Vegetable yield good. Payrolls and production better than a year ago. Sales of building materials and lumber greatly increased due to extensive housing program, erection of cantonment, air bases, and other projects. Collections steady with last year. APRIL—New Orleans bank clearings up about 20% from a year ago.

REGIONAL TRADE BAROMETERS

FOR FEBRUARY 1941



NEAR-RECORD SPRING TRADE VOLUME

The United States Trade Barometer rose to 112.7 (preliminary) in March from 108.3 in February. Barometer figures are compiled by Dr. L. D. H. Weld, Director of Research, McCann-Erickson, Inc.; trade information is reported by branch offices of DUN & BRADSTREET, INC.

CONSUMER spending becomes more and more generous as record factory payrolls and higher agricultural income flow into retail channels at an unexpectedly fast rate.

Preliminary reports for the month of April indicate that the burst of consumer spending in the pre-Easter period and the well-sustained buying in following weeks pushed dollar volume to a high exceeded only by the record 1929-1930 seasons, and unit volume to the best totals in history for the period.

Retail trade was lifted to the year's peak in the spectacular climax of the pre-Easter selling period, and shopping in many centers resembled the Christmas rush. Merchants reported the buying movement general, extended well beyond seasonal lines. Interest centered, however, on Spring apparel and accessories and sales of department and specialty stores outran general trade gains. In most lines a significant increase was noted in the size of the average sales check,

with particular improvement in the lower and medium price brackets.

Post-Easter trade showed unexpected strength, indicating that the buying rush had not spent itself. Favorable weather, unusually high temperatures, and special sales as well as anticipatory buying in durable goods and such lines as groceries, shirts, pajamas, and blankets, aided in sustaining activity. The number of off-price sales was limited by the small amount of merchandise left in stock, but bargain sales when held were generally sell-outs.

Trade gains in March outdistanced the normal seasonal upturn and the seasonally adjusted trade barometer advanced to 112.7 from 108.3 in February. Despite poor weather and the fact that Easter buying was concentrated in this month last year, the index of consumer purchasing in March increased 18 per cent over last year. An important factor was the near-record demand for automobiles

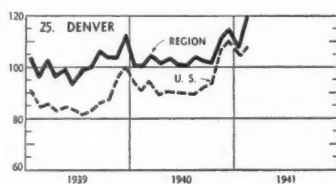
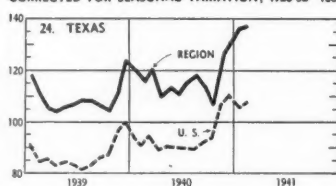
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24. TEXAS

FEB., 137.7 JAN., 136.9 FEB. 1940, 116.5
UNADJUSTED: FEB., 130.3; JAN., 120.2

MARCH—Percentage retail trade increases over previous March: Fort Worth 8, Houston-Austin 2, Beaumont-San Antonio 5, El Paso 20; decreases: Dallas 1, Shreveport 5. Wholesale trade increases: Dallas 5, Houston 4, San Antonio 13, Fort Worth 7. Crops and ranges in satisfactory condition. Payrolls and production generally above last year. Output of work garments and steel more than 25% ahead of 1940. Defense industries at capacity. Beaumont shipyards have large Government contracts. Collections vary. APRIL—Dallas aircraft plant with \$2,000,000 monthly payroll starts production; pre-Easter department store sales up about 35% from 1940.

CORRECTED FOR SEASONAL VARIATION; 1928-32 100



25. DENVER

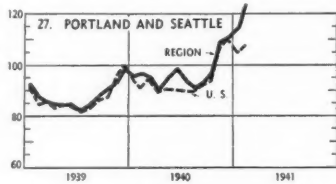
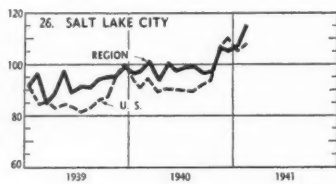
FEB., 119.8 JAN., 107.8 FEB. 1940, 100.2
UNADJUSTED: FEB., 110.3; JAN., 96.2

MARCH—Percentage retail trade changes from previous March: Denver +12, Albuquerque —5. Denver wholesale trade up 7%. Subsoil moisture good; range condition excellent. Payrolls and production steady to better than a year ago. Heavy machinery, furniture, steel, and lumber industries continue active and report materials difficult to obtain. Mountain snows kept logging crews idle. Defense construction absorbing unemployed and sharply stimulating retail trade. Arms plant contractors near Denver now employing 600 expanding force to 4,500 by June. Collections vary. APRIL—Pre-Easter department store sales up 15 to 20% from 1940 in Denver.

26. SALT LAKE CITY

FEB., 115.0 JAN., 108.0 FEB. 1940, 98.1
UNADJUSTED: FEB., 99.9; JAN., 95.7

MARCH—Salt Lake City retail trade 7% above a year ago, up about 15% in the month. Wholesale trade 20% ahead of last March, 10% above last month. Farm prices steady. Grain conditions good. Payrolls well above a year ago, production 20% above last year. Payrolls and production higher in month. Defense contracts largely responsible for the increased activity, especially in building and industrial goods lines. Collections steady with last year in wholesaling and manufacturing, slightly poorer in retailing. APRIL—About 30,000 coal miners on strike. Salt Lake City pre-Easter department store sales up about 25% from 1940.



27. PORTLAND AND SEATTLE

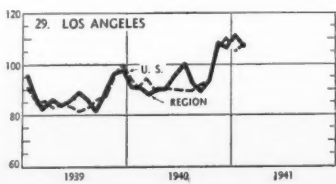
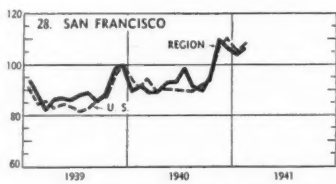
FEB., 123.7 JAN., 114.6 FEB. 1940, 97.3
UNADJUSTED: FEB., 106.8; JAN., 96.4

MARCH—Percentage retail trade changes from previous March: Tacoma-Seattle +15, Spokane +5, Portland —8. Seattle-Portland wholesale trade up 10%. Winter grain acreage up 25% from 1940. Apple market slow. Payrolls and production generally above last year. All Tacoma plants working full time, many on two shifts. Portland shipyards have \$95,000,000 contracts. Lumber demand continues good; defense buying a major factor. Heavy machinery concerns, lumber mills very active. Aircraft output increased. Collections generally better than last year. APRIL—Pre-Easter department store sales up 20 to 25% from 1940 in Portland and Seattle.

28. SAN FRANCISCO

FEB., 106.0 JAN., 104.2 FEB. 1940, 91.7
UNADJUSTED: FEB., 100.4; JAN., 93.9

MARCH—Percentage retail trade increases over previous March: San Francisco 7, Oakland 10, Sacramento 5; Fresno off 5. San Francisco wholesale trade up 20%. Fruit crop hurt by excessive rains; crops normal except in areas damaged by rains. Payrolls and production generally above a year ago and up in month. Manufacturers' sales of wines and brandies, building materials, and metal products increased. Canning season opened. Construction and shipbuilding very active. Collections generally steady with last year. APRIL—Pre-Easter department store sales up about 35% from 1940 in San Francisco. Range condition good.



29. LOS ANGELES

FEB., 107.6 JAN., 111.4 FEB. 1940, 91.7
UNADJUSTED: FEB., 105.1; JAN., 104.2

MARCH—Percentage retail trade increases over previous March: Los Angeles 7, San Diego 31, Phoenix up. Los Angeles wholesale trade up 12%. Rains damaged orange and truck crops. Record lemon crop moving slowly. Ample water for irrigation. Payrolls and production above a year ago. Mining somewhat more active than last year. Aircraft and shipbuilding continue steady growth. San Diego housing problem still acute: building permits totalled \$13,000,000 against \$900,000 last year. Army personnel expanding rapidly in San Diego area. Collections steady to better than 1940. APRIL—Pre-Easter department store sales up about 35% in Los Angeles.

MANHATTAN SKYLINE AT SUNSET—PHOTOGRAPH BY EWING GALLOWAY



and housefurnishings, which moved so rapidly that many stores found stocks difficult to maintain.

Industrial centers and towns near Army camps or defense construction felt the sharpest trade gains in March and April. Although buying, especially in the latter month, was well-distributed the South, Middle West, and East outpaced other sections of the country.

Barometers now available for twenty-nine regions show that in February three Southern regions and Detroit led trade gains with a rise of 25 per cent or more. The Maryland and Virginia region turned in the best performance with a year-to-year gain of 38 per cent. Detroit followed with 29 per cent, the Carolinas with 26 per cent, Memphis with 25 per cent. No region made a gain of less than 12 per cent over last year.

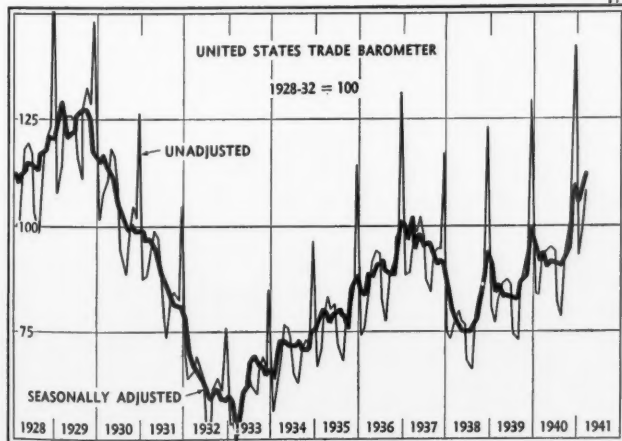
Consumer purchasing exceeded seasonal expectations during February in twenty-two of the twenty-nine regions. Trade was up more than 10 per cent over January in New Jersey, Detroit, Maryland and Virginia, and Denver. Seven areas failed to make the normal seasonal change. Florida lagged most and dropped 8 per cent below January.

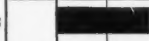
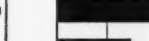

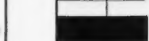





















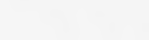
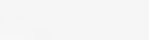
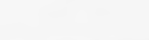
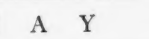
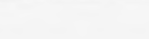
(Charts and trade reports for each region begin on page 28)

THE MAP AND CHART compare the February, 1941, indexes with those for the same month a year ago. The column at the extreme right of the chart indicates the relative importance of the regions: the figures are percentages of national retail trade from the 1935 Census of Business.

THE INDEXES for the regions are charted, with U. S., from 1939, on pages 28, 30, 32, 34. They are composites based on bank debits (Federal Reserve Board), department store sales (Federal Reserve Board), new car registrations (R. L. Polk & Company), and life insurance sales (Life Insurance Sales Research Bureau). In regions 2, 3, 4, 5, and 14, wholesale sales (Department of Commerce), and in region 2, advertising linage (*Editor and Publisher*), which made those indexes more accurate, are included. Each index is separately adjusted for seasonal variation and for the number of business days in each month. All are comparable. The average for the five years 1928-1932 equals 100. The preliminary figure for the United States is computed one month before regional figures are available.

THE PARAGRAPHS which are printed opposite the twenty-nine regional charts quote figures for the month of March and for the first half of April based upon opinions and comments of business men in various lines of trade, gathered and weighed by the local DUN & BRADSTREET offices.



REGIONAL TRADE BAROMETERS							
Region	Feb. 1941 Regional Index	Feb. 1941 Compared with Feb. 1940 (%)					Retail 1935 Sales %
		-10	0	+10	+20	+30		+40
U. S.	108.3						100.0
1. NEW ENGLAND	97.0						7.8
2. NEW YORK CITY	85.8						10.3
3. ALBANY AND SYRACUSE	110.3						2.5
4. BUFFALO AND ROCHESTER	97.9						1.9
5. NORTHERN NEW JERSEY	100.1						2.9
6. PHILADELPHIA	100.0						6.2
7. PITTSBURGH	108.1						3.7
8. CLEVELAND	116.9						2.9
9. CINCINNATI AND COLUMBUS	123.1						3.1
10. INDIANAPOLIS AND LOUISVILLE	121.4						2.6
11. CHICAGO	105.8						6.4
12. DETROIT	128.9						4.0
13. MILWAUKEE	116.6						2.2
14. MINNEAPOLIS AND ST. PAUL	114.7						4.5
15. IOWA AND NEBRASKA	95.9						3.0
16. ST. LOUIS	101.4						2.5
17. KANSAS CITY	101.6						3.6
18. MARYLAND AND VIRGINIA	143.7						3.8
19. NORTH AND SOUTH CAROLINA	142.9						2.1
20. ATLANTA AND BIRMINGHAM	151.9						3.5
21. FLORIDA	141.6						1.3
22. MEMPHIS	125.4						1.5
23. NEW ORLEANS	118.0						1.0
24. TEXAS	137.7						4.5
25. DENVER	119.8						1.3
26. SALT LAKE CITY	115.0						.8
27. PORTLAND AND SEATTLE	123.7						2.7
28. SAN FRANCISCO	106.0						3.4
29. LOS ANGELES	107.6						3.9

SIGNIFICANT BUSINESS INDICATORS

COMPILED BY THE STATISTICAL STAFF OF "DUN'S REVIEW"
More detailed figures appear in "DUN'S STATISTICAL REVIEW"

Building Permit Values—215 Cities

GEOGRAPHICAL DIVISIONS:	March 1941	March 1940	Per Cent Change	February 1941	Per Cent Change
New England.....	\$9,555,352	\$7,071,377	+ 35.1	\$5,677,362	+ 68.3
Middle Atlantic.....	26,587,215	31,592,213	- 15.8	20,216,009	+ 31.5
South Atlantic.....	12,776,076	12,759,014	+ 0.1	9,555,354	+ 33.7
East Central.....	28,918,231	19,277,130	+ 50.0	20,414,457	+ 41.7
South Central.....	12,462,686	12,198,710	+ 2.2	9,183,815	+ 35.7
West Central.....	8,790,321	4,418,253	+ 99.0	3,864,183	+127.5
Mountain.....	5,494,551	2,539,222	+116.4	1,931,991	+184.4
Pacific.....	33,369,927	20,742,873	+ 60.9	22,757,493	+ 46.6
Total U. S.....	\$137,954,359	\$110,598,792	+ 24.7	\$93,600,664	+ 47.4
New York City.....	\$16,990,799	\$21,646,265	- 21.5	\$13,675,776	+ 24.2
Outside N. Y. C.....	\$120,963,560	\$88,952,527	+ 36.0	\$79,924,888	+ 51.3

Bank Clearings—23 U. S. Cities

(Millions of dollars)

	Monthly			Daily Average		
	1941	1940	1939	1941	1940	1939
January.....	26,155	24,140	23,383	1,005.9	928.5	935.3
February.....	22,687	20,641	19,885	1,031.2	897.4	903.8
March.....	27,609	23,681	25,192	1,061.9	910.8	933.0
April.....	23,587	21,931	21,931	907.2	879.2	879.2
May.....	24,361	22,374	22,374	936.9	860.5	860.5
June.....	21,838	23,212	23,212	873.5	892.8	892.8
July.....	22,939	21,576	21,576	882.3	863.1	863.1
August.....	21,046	22,782	22,782	779.5	843.8	843.8
September.....	21,083	24,015	24,015	878.5	960.6	960.6
October.....	25,289	22,469	22,469	972.7	898.8	898.8
November.....	25,224	22,807	22,807	1,096.7	991.6	991.6
December.....	27,862	26,827	26,827	1,114.5	1,073.1	1,073.1
Total.....	281,691	276,503	276,503	931.5	919.6	919.6

Bank Clearings for Individual Cities

(Thousands of dollars)

	March 1941	March 1940	Per Cent Change	February 1941
Boston.....	1,142,472	974,682	+ 17.2	997,159
Philadelphia.....	2,138,000	1,759,000	+ 21.5	1,793,000
Buffalo.....	180,043	143,014	+ 25.9	155,772
Pittsburgh.....	720,775	570,198	+ 26.4	620,473
Cleveland.....	577,120	434,695	+ 32.8	473,707
Cincinnati.....	331,637	271,082	+ 22.3	271,491
Baltimore.....	413,858	343,896	+ 20.3	364,100
Richmond.....	214,332	163,551	+ 31.0	184,541
Atlanta.....	376,000	273,800	+ 37.3	317,400
New Orleans.....	222,147	191,436	+ 16.0	184,756
Chicago.....	1,614,860	1,364,885	+ 18.3	1,338,315
Detroit.....	745,833	479,484	+ 55.5	592,215
St. Louis.....	472,082	396,411	+ 19.1	394,397
Louisville.....	204,809	184,197	+ 11.2	185,697
Minneapolis.....	325,059	294,171	+ 10.5	271,576
Kansas City.....	459,927	393,958	+ 16.7	390,102
Omaha.....	152,875	132,157	+ 15.7	125,879
Dallas.....	288,664	253,559	+ 13.7	248,895
Houston.....	240,063	218,118	+ 10.1	212,582
San Francisco.....	730,214	627,011	+ 16.5	618,401
Portland, Ore.....	199,895	158,927	+ 25.8	151,255
Seattle.....	222,035	163,328	+ 35.9	183,308
Total 22 Cities.....	11,972,700	9,791,560	+ 22.3	10,075,021
New York.....	15,636,277	13,889,325	+ 12.6	12,611,576
Total 23 Cities.....	27,608,977	23,680,885	+ 16.6	22,686,597

Dun & Bradstreet Wholesale Food Price Index

The index represents the sum total of the wholesale price per pound of 31 commodities in general use.

1941	1940	1939
Apr. 29..\$2.80	Apr. 30..\$2.34	May 2..\$2.27
Apr. 22.. 2.78	Apr. 23.. 2.33	Apr. 25.. 2.27
Apr. 15.. 2.77	Apr. 16.. 2.30	Apr. 18.. 2.28
Apr. 8.. 2.75	Apr. 9.. 2.30	Apr. 11.. 2.28
Apr. 1.. 2.72	Apr. 2.. 2.28	Apr. 4.. 2.27
Mar. 25.. 2.69	Mar. 26.. 2.29	Mar. 28.. 2.29
Mar. 18.. 2.65	Mar. 19.. 2.29	Mar. 21.. 2.31
Mar. 11.. 2.61	Mar. 12.. 2.31	Mar. 14.. 2.29

HIGH LOW

1941.. \$2.80	Apr. 29	\$2.50	Jan. 7
1940.. \$2.49	Dec. 10	\$2.18	June 18
1939.. \$2.46	Sept. 19	\$2.13	Aug. 15

Dun & Bradstreet Daily Wholesale Price Index 30 Basic Commodities

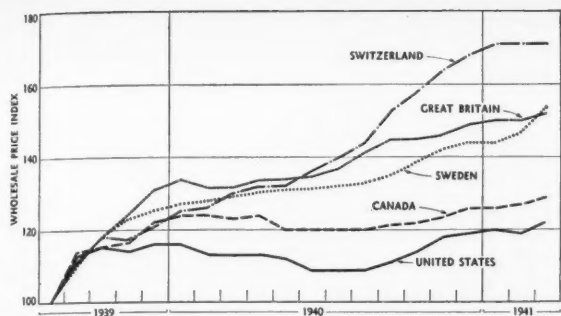
(1930-1932 = 100)

	Apr. 1941	Mar. 1941	Feb. 1941	Jan. 1941
1.....	128.89	124.31	123.42	*.....
2.....	129.62	†.....	†.....	124.89
3.....	129.23	124.30	123.43	124.60
4.....	129.02	124.31	123.34	124.59
5.....	129.32	124.20	123.48	†.....
6.....	†.....	124.73	123.56	124.93
7.....	129.44	124.80	123.76	124.24
8.....	128.77	125.10	123.82	124.54
9.....	128.89	†.....	†.....	125.21
10.....	129.44	126.35	123.86	125.12
11.....	*.....	126.10	123.27	124.86
12.....	129.76	126.09	*.....	†.....
13.....	†.....	126.25	123.06	123.98
14.....	129.65	126.53	123.35	124.06
15.....	129.64	126.74	123.18	124.94
16.....	129.67	†.....	†.....	125.05
17.....	129.83	126.33	123.03	124.67
18.....	129.25	127.38	123.52	124.57
19.....	129.10	127.64	123.62	†.....
20.....	†.....	127.75	124.03	124.55
21.....	129.12	127.68	123.65	124.03
22.....	128.62	127.60	*.....	124.31
23.....	128.59	†.....	†.....	124.17
24.....	129.05	127.89	124.36	124.79
25.....	129.35	127.95	124.39	124.65
26.....	129.34	128.45	124.38	†.....
27.....	†.....	128.48	124.18	124.05
28.....	129.41	129.17	124.31	123.72
29.....	129.60	129.66	124.31	123.39
30.....	129.86	†.....	†.....	123.81
31.....	129.60	†.....	†.....	123.55

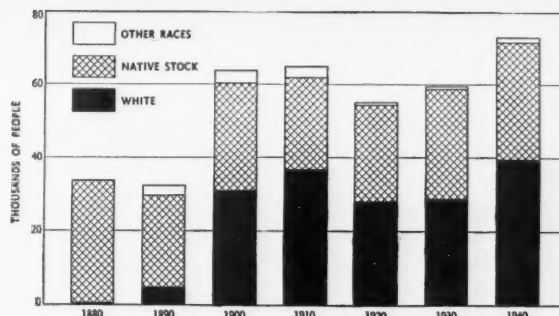
† Sunday. * Markets closed.

HIGH LOW

1941.. 129.86	Apr. 30	123.03	Feb. 17
1940.. 124.84	Dec. 31	112.42	Aug. 19
1939.. 124.19	Dec. 18	101.40	July 24



WHOLESALE PRICES IN FIVE COUNTRIES, August 1939 = 100—August 1939-March 1941—General Motors Corp. and Cornell University—Prices rose to a war-time peak by April, increased most in neutral Switzerland.



RACIAL COMPOSITION OF THE POPULATION OF ALASKA—1880-1940—U. S. Bureau of the Census—Population growth in the past decade was traceable in large part to the biggest gain in white population since the Gold Rush.

THROUGH THE STATISTICIAN'S EYES

ODD AND INTERESTING ITEMS FROM THE MONTH'S RECORD

Price Rises in Five Countries

TWO ISOLATED NEUTRALS—Switzerland and Sweden—have experienced sharper price rises than Great Britain since the opening of the present war. By April wholesale prices in Switzerland had increased 80 per cent over the pre-war level, in Sweden 57 per cent, and in England 52 per cent.

Relatively moderate price rises have occurred thus far in Canada and in the United States. In the latter prices rose 26 per cent and in Canada 31 per cent, according to the indexes of 40 basic commodity prices compiled by General Motors Corporation and Cornell University.

In all five countries prices were at a war-time peak in April. The trend has been consistently upward since August 1939 for the European nations. Each month since that date brought higher prices in England and Sweden; increases have been evident in Switzerland since November 1939, when prices sagged somewhat for one month.

After the first burst of excitement when war was declared, wholesale prices tended to level off in Canada; in the United States they declined from a high of 116 in January 1940 to 109 by June. But since August 1940 when production swung rapidly upward, prices in Canada and the United States have advanced steadily. After a year of war in September 1940, quotations in the United States were only 11 per cent above August 1939; in April 1941, seven months later, they stood 26 per cent above the pre-war level.

Population Growth in Alaska

ALASKA, THE AMERICAN FRONTIER for pioneers, showed significant signs of frontier growth in the last decade. Population increased 22 per cent—largest ten-year gain with the exception of the Gold Rush era—to number 72,524

persons, highest count in the history of the Territory. The depression of the thirties and the encouragement given to U. S. citizens to emigrate to Alaska and further its economic development are reflected in the rise, which resulted chiefly from gains in the white population. White population, at 39,170, was the largest in Alaska's history, having increased 37 per cent from 1930 to outnumber the native stock of 32,458 which recorded a gain of only 8 per cent, according to the U. S. Bureau of the Census.

Story of Alaska's history is told in her population statistics, from 1880 when only 430 white men lived in the unexplored Territory to the present-day record population. Although the United States acquired Alaska in 1867 the public evinced little interest in the Territory until the Gold Rush of 1890 when thousands of men journeyed north to seek riches and the white population shot from 4,298 in 1890 to 30,493 by 1900.

The growth in the following decade was due to immigration of white foreigners, as the number of both native stock and native whites, which include citizens of continental U. S. and possessions, declined. In the ten years 1910-1920 the World War and a disastrous epidemic of Spanish flu depleted the population by 15 per cent, a decline due entirely to the loss of almost one-quarter of the white persons in Alaska.

Since early in this century the number of white foreigners living in the Territory has steadily declined from a peak of 17,974 or about 50 per cent of all whites to 8,786 or 20 per cent in 1940. The yellow race and other races have never bulked large in the total population; Japanese numbered 263 in 1940 as compared with 312 in 1920.

Native stock (Aleuts, Eskimos, Indians) has fluctuated from 25,000 to 33,000 persons and in 1940 was more numerous than at any time since 1880. Native population has shown a consistent gradual uptrend since 1910.

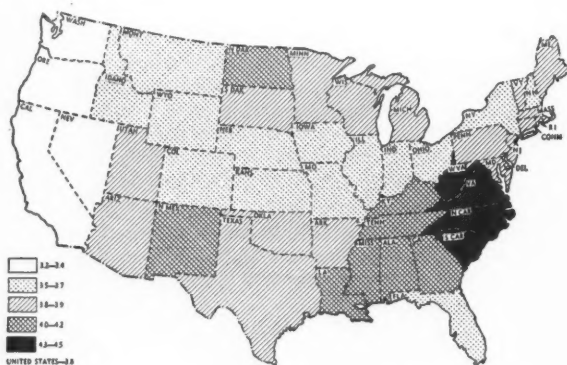
[37]

Families Smaller But More Numerous

FAMILIES have become smaller in the United States, but the number of family units—important in gaging potential markets—has increased, according to the U. S. Bureau of the Census' study of average population per occupied dwelling unit.

The average family in 1940 was composed of 3.8 persons, as compared with 4.1 in 1930 and 4.6 in 1900. The rate of decline was faster in the past decade than in preceding ones, and dropped 8 per cent or .3 of a person as against .2 of a person in previous ten-year periods. The decline in size since the turn of the century can be attributed to the declining birth rate and the setting up of separate establishments where two or more families formerly lived together as one unit.

Urban families tended to be smaller than rural families, as was the case in 1930. Latest census figures for 1940 put



AVERAGE SIZE OF FAMILY BY STATES—1940—U. S. Bureau of the Census
—The South Atlantic area, particularly North and South Carolina, raised the largest families; the Pacific Coast the smallest.

the urban family unit at 3.6 persons, the rural at 4.0 persons. Largest families clustered in the South Atlantic and East South Central States, as the map shows. North Carolina led the States with an average family of 4.5 persons; smallest size was on the Pacific Coast, where 3.2 persons made up the family unit.

Boon to the construction and home finance industries and to the many merchants supplying household needs is the expansion in potential markets for their products. The number of families in the United States increased 17 per cent in the past ten years, as against a population increase of 7 per cent. Actual numbers were 34,861,625 families in 1940—as indicated by the number of occupied dwelling units—compared with 29,904,663 private families in 1930.

The Pacific Coast, Mountain, and South Atlantic sections of the country recorded a gain of over 21 per cent in the number of private families; New England showed the smallest gain of 11 per cent. Heading the States was the District of Columbia where the number of families ex-

panded 38 per cent. Florida, California, Nevada, New Mexico, and Idaho also showed large gains. Heavy concentration of families was of course found in industrial areas. Over 40 per cent of all families were settled in eight Middle Atlantic and East North Central States. New York held the largest number of families—about 3,700,000.

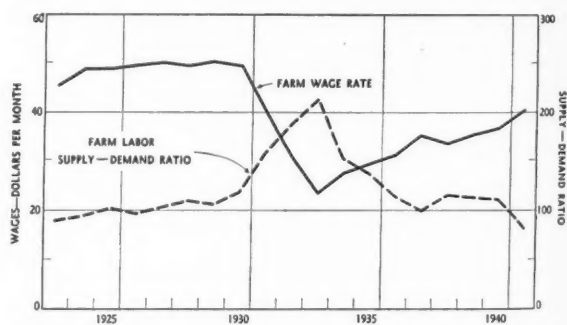
Farm Labor Supply Sharply Lower

THE DEFENSE PROGRAM has cut sharply into the available supply of farm workers at a time when demand for workers is greatly expanded and thus farm wage rates have been boosted to the highest level since 1930. The monthly farm wage rate without board jumped to \$40.44 as of April 1, from \$36.61 on January 1—an increase about seven times as sharp as the normal seasonal rise—and compared with \$36.41 at this time last year, reports the United States Department of Agriculture.

Attraction of employment with higher pay in manufacturing and construction industries, plus conscription for the army, were largely responsible for the decline in the supply of workers to 76 per cent of normal on April 1, as compared with 92 per cent last year and 86 per cent in January 1941. At the same time, with farmers enjoying higher returns for agricultural commodities, demand for farm labor expanded sharply to 92 per cent of normal from 84 per cent in April 1940 and 87 per cent at the beginning of 1941.

The combination of both these factors depressed the percentage of supply in relation to demand to 82 per cent on April 1, lowest for this time of the year since 1920 and the third lowest on record. In April 1940 the supply-demand ratio was about even at 99 per cent.

Geographically the supply-demand picture changed considerably in the past year. Reflecting the pull of the defense program, the Northeastern industrial area, from Maine to Michigan and south to North Carolina reported the smallest amount of workers available, with supply less than 75 per cent of demand, as against 100 to 110 per cent last April.



FARM WAGE RATES AND LABOR SUPPLY-DEMAND RATIO—1923-1941 (as of April 1)—Agricultural Marketing Service, U. S. Department of Agriculture—Wage rates reached the highest level since 1930 as the percentage of labor supply to demand declined to the lowest point since 1920.

INDUSTRIAL AND COMMERCIAL FAILURES

	NUMBER OF FAILURES			CURRENT LIABILITIES <i>Thousands of dollars</i>			TOTAL LIABILITIES <i>Thousands of dollars</i>			DUN'S INSOLVENCY INDEX†					
	1941	1940	1939	1941	1940	1939	1941	1940	1939	UNADJUSTED			ADJUSTED‡		
										1941	1940	1939	1941	1940	1939
Jan.	1,124	1,237	1,567	11,888	15,279	20,790	12,535	15,805	24,860	62.2	67.1	86.0	51.8	54.6	69.9
Feb.	1,129	1,042	1,202	13,483	13,472	13,582	14,323	13,600	13,589	71.3	66.7	78.0	62.0	58.0	67.8
Mar.	1,211	1,197	1,322	13,444	11,681	19,002	14,754	12,130	19,315	62.5	62.6	72.6	61.3	61.4	71.9
Apr. ....	.....	1,291	1,331	.....	16,247	18,579	.....	17,114	21,837	...	70.1	73.1	...	67.4	71.0
May ....	.....	1,238	1,334	.....	13,068	15,897	.....	13,437	20,734	...	66.9	70.5	...	65.6	69.8
June ....	.....	1,114	1,119	.....	13,734	12,581	.....	25,101	12,737	...	62.5	66.5	...	64.4	69.3
July ....	.....	1,175	1,153	.....	16,213	14,999	.....	17,756	23,634	...	63.0	63.0	...	70.8	70.8
Aug. ....	.....	1,128	1,126	.....	12,997	12,637	.....	13,223	13,092	...	60.6	61.4	...	71.3	72.2
Sept. ....	.....	976	1,043	.....	11,397	10,545	.....	15,473	11,729	...	54.3	59.0	...	64.6	70.2
Oct. ....	.....	1,111	1,234	.....	12,715	17,464	.....	14,236	18,119	...	61.7	67.0	...	67.1	72.8
Nov. ....	.....	1,024	1,184	.....	16,572	13,201	.....	17,987	14,874	...	61.9	72.6	...	59.5	69.8
Dec. ....	.....	1,086	1,153	.....	13,309	13,243	.....	14,480	14,934	...	58.0	65.0	...	57.4	64.3
Total ....	.....	13,619	14,768	.....	166,684	182,520	.....	190,342	209,454	...	63.0	69.6	...	...	...

† Apparent annual failures per 10,000 enterprises. ‡ For seasonal variation.

ANALYZING *the* RECORD of INDUSTRIAL and COMMERCIAL FAILURES

AVERAGE DAILY FAILURES DECLINE IN MARCH

INDUSTRIAL and commercial failures totalled 1,211 in the long month of March compared with 1,129 in the short month of February. Current liabilities changed only slightly, dropping to \$13,444,000 in March from \$13,483,000 in February. In March 1940 failures numbered 1,197 with debts of \$11,681,000.

The difference in the number of working days in February and March is important. The insolvency index, which adjusts for this discrepancy in working days and, in addition, relates the number of failures to the number of concerns in business, is a better measure of trend than is the actual number of failures.

The seeming rise in March was converted by the index into a decline, which amounted to 12 per cent, as the rate of failures dropped from 71.3 of every 10,000 concerns in business in February to 62.5 in March. A substantial decline in the index in March is a

A BUSINESS FAILURE, as defined for this record, occurs when a commercial or industrial enterprise is involved in a court proceeding or a voluntary action which is likely to end in loss to creditors. Failures in this sense are but a small part of total discontinuances from business.

normal occurrence and a change in the index when adjusted for seasonal variation of less than a point indicated that the current downward movement was not excessive. It was an approximately normal movement following most abnormal trends in the first two months of the year.

According to the adjusted index failures were very low in January, and rose sharply in February. The situation in the first three months of 1940 was similar, relatively few failures in January, followed by a sharp increase in February, and somewhat unlike this year,

again in March. The March level reached in the two years was, however, almost identical—61.4 in March 1940 compared with 61.3 at the present time.

The conversion to a daily average of March and February failures in the various classifications permits comparison on a basis similar to the index. Average daily failures were off in March in a sweeping decline through all main industry groups. It amounted to 30 per cent in commercial service, 17 per cent in wholesale trade, 16 per cent in manufacturing, 15 per cent in construction, and 9 per cent in retail trade.

Of the manufacturing industries the drop was particularly noticeable in textiles and clothing, lumber products, leather goods, machinery, and transportation equipment. Moving in the opposite direction, failures among food manufacturers increased in March. Likewise among wholesalers, food product dealers went out in March at an increased rate over February. Fail-

ures in most other wholesale lines were down. The decline was widespread in retail trade with daily failures down in almost all retail lines.

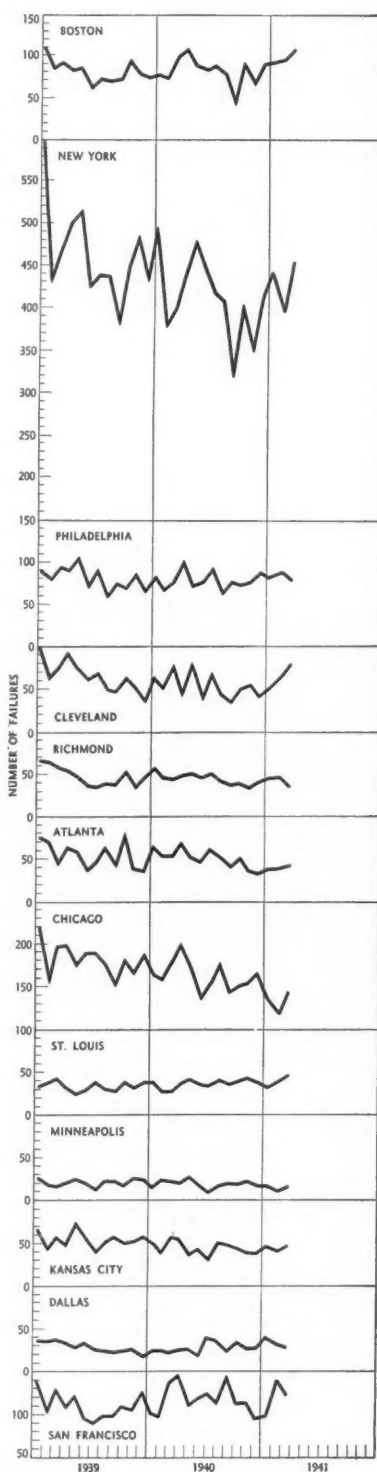
Direct comparison is possible between March failures in different years. In 1941 and 1940 the March level was similar, but the distribution of failures among the various industry groups had shifted somewhat:

INDUSTRY GROUP	March 1941	March 1940	Per Cent Change
Manufacturing	188	202	- 7
Wholesale Trade . . .	105	123	-15
Retail Trade	800	754	+ 6
Construction	60	63	- 5
Commercial Service . .	58	55	+ 5
Total	1,211	1,197	+ 1

In the groups closest to the ultimate consumer, retail trade and commercial service, failures were currently higher than a year ago, by 6 and 5 per cent respectively. In the other main groups failures were less numerous than a year ago; they were off 7 per cent in manufacturing, 5 per cent in construction, and 15 per cent in wholesale trade. The manufacturing decline was well distributed throughout the various production lines, with only foods and mining showing any increase. Despite a substantial decline in wholesale trade failures as a whole, wholesale food failures were considerably higher than a year ago. Although general merchandise and apparel store failures were fewer than a year ago, the number of failures in most other retail lines increased, particularly in home furnishings and hardware lines. Food store defaults were about equal in the two periods.

As to sizes of failures, the most significant feature of the March record was the continued increase in the number of substantial failures with liabilities between \$25,000 and \$100,000. These increased from 69 in January to 76 in February and 103 in March, or on a daily basis 38 per cent since January. These moderately large failures were most prevalent among retailers, rising in that group to 46 in March from 26 in February. A year ago there were 26. Failures of this size among manufac-

FAILURES IN FEDERAL RESERVE DISTRICTS



turers numbered only 27 in March against 33 in February and 39 a year ago. The decline in failures from February to March was among the smaller failures with debts under \$25,000 and also among the very large concerns.

As compared with the similar number of failures in March a year ago, the current record contains more large failures, more substantial failures, a few more with debts between \$5,000 and \$25,000, but fewer very small failures:

SIZE GROUP LIABILITIES	March 1941	March 1940	Per Cent Change
Under \$5,000	645	659	- 2
\$5,000-\$25,000	447	434	+ 3
\$25,000-\$100,000 . . .	103	94	+10
\$100,000-\$1,000,000 .	16	10	+60
\$1,000,000 and over . .	..	..	..
Total	1,211	1,197	+ 1

Geographically, average daily failures were lower in March than in February in nine out of the twelve Federal Reserve Districts. Among these, Boston and Richmond reversed definite upward trends in effect since last November, and Philadelphia also turned sharply downward after a slightly intermittent upward trend since last August. The exceptions to the general downward movement were the Cleveland, Chicago, and Minnesota districts. Chicago failures have remained unchanged for three months; while for the Cleveland district, after increases from a low December, failures occurred at the same rate in March as in February. Minnesota failures rose sharply following three months of lessening failures.

Quarterly Failures

In terms of the insolvency index, the trend of failures in the first quarters of 1941 and 1940 was similar. The actual number of failures occurring during the first three months of each year was almost identical, 3,464 in 1941 against 3,476 in 1940. Within these similar totals, however, there has been a considerable shifting in the industrial, size, and geographical distribution of the failures.

Industrially, retail and commercial service failures were somewhat higher in the current quarter than a year ago,

whereas manufacturing, wholesale trade, and construction failures ran from 10 to 13 per cent lower.

INDUSTRY GROUP	Jan.-Mar. 1941	Jan.-Mar. 1940	Per Cent Change
Manufacturing	531	598	-11
Wholesale Trade	304	337	-10
Retail Trade	2,290	2,196	+4
Construction	172	198	-13
Commercial Service . . .	167	147	+14

LIABILITIES	Jan.-Mar. 1941	Jan.-Mar. 1940	Per Cent Change
Under \$5,000	1,905	1,710	+11
\$5,000-\$25,000	1,255	1,431	-12
\$25,000-\$100,000 . . .	248	293	-15
\$100,000 and over . . .	56	42	+33

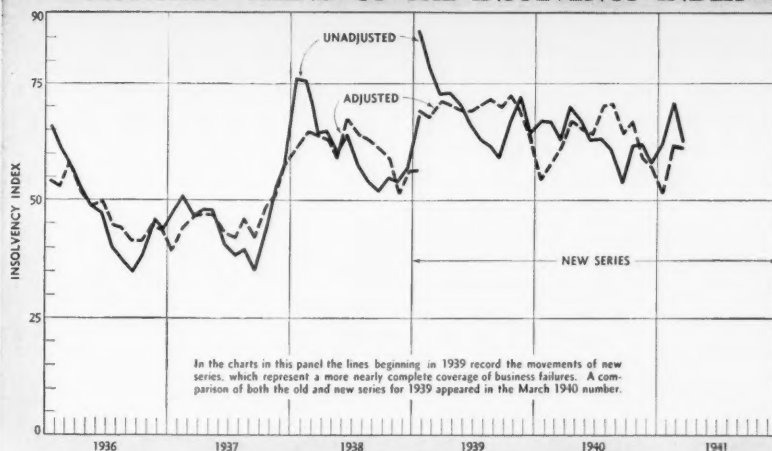
FEDERAL RESERVE DISTRICTS	Jan.-Mar. 1941	Jan.-Mar. 1940	Per Cent Change
Atlanta	124	177	-30
Minneapolis	44	60	-27
Chicago	401	505	-21
Richmond	127	148	-14
Kansas City	140	150	-7
New York	1,297	1,271	+2
Cleveland	201	196	+3
San Francisco	361	339	+6
Philadelphia	248	224	+11
Boston	294	246	+20
St. Louis	123	92	+34
Dallas	104	68	+53
Total	3,464	3,476	0

By size, failures with debts under \$25,000 numbered about the same in the two periods, while failures with debts in excess of \$25,000 had dropped about 10 per cent. However, among the small failures the weight of numbers had shifted more heavily to the very small failures with debts under \$5,000. At the other extreme, the very large failures with liabilities of \$100,000 or more had increased 33 per cent, from 42 to 56.

Geographically, there was a sharp division between the areas of falling and rising failures. First-quarter failures were definitely lower in 1941 than in 1940 in the South Atlantic States and in the Middle Western districts of Chicago, Minneapolis, and Kansas City. The New York and Cleveland areas were steady, but in the remaining sections of the country—the New England, Philadelphia, St. Louis, Dallas, and San Francisco districts—failures were higher than a year ago.

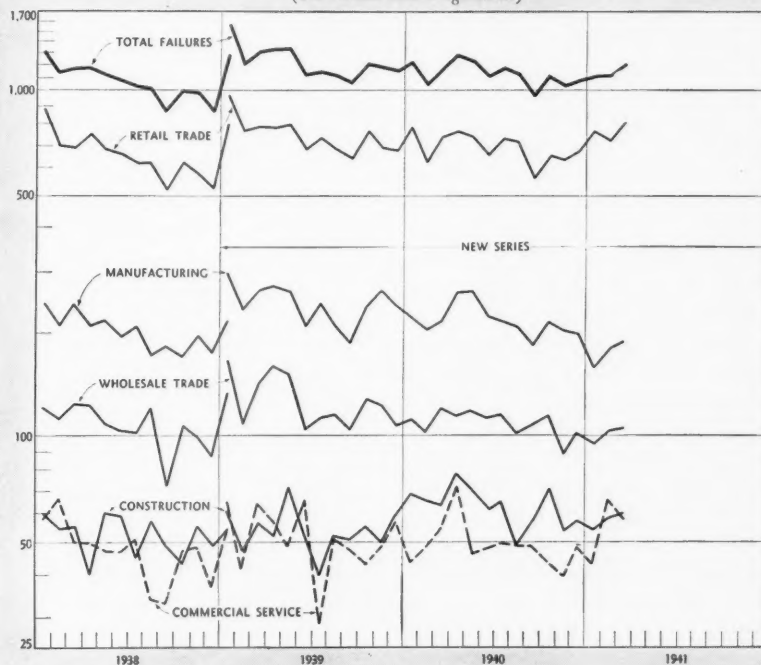
Current liabilities during 1940 showed no severe monthly fluctuations, but ranged from \$11,000,000 to \$16,000,000 a month. In the first quarter of 1941 they maintained an equally smooth trend, and totalled only \$38,815,000

MONTHLY TREND OF THE INSOLVENCY INDEX



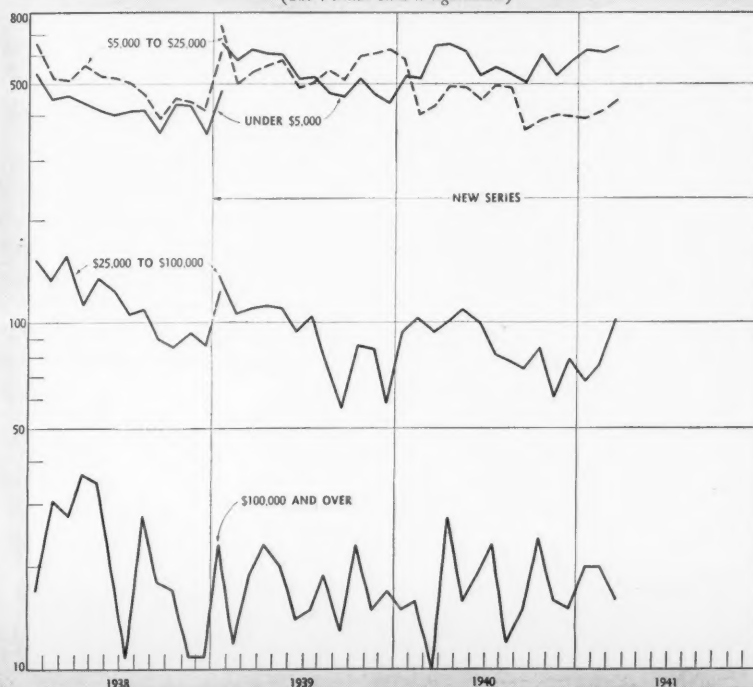
FAILURES BY INDUSTRIAL GROUPS

(The Vertical Scale is logarithmic)



FAILURES BY SIZE OF LIABILITIES

(The Vertical Scale is logarithmic)



compared with \$40,432,000 in early 1940. Losses during the quarter were considerably less in construction lines than a year ago, and were slightly down in other lines except retail trade, where potential losses increased. In manufacturing, considerably less money was involved in failures of breweries than a year ago.

There were very few individual lines of business in which there were striking changes in the number of quarterly failures in the two years. In manufacturing, there was a decrease in the number of failures among fruit and vegetable canners and among manufacturers of shoes. On the other hand, failures had increased noticeably among knit goods concerns. Improvement in the shoe industry was also evidenced by fewer failures among retail shoe stores. More retail failures were reported, however, in building material lines and among automobile dealers than a year ago.

There were 56 large failures in the first quarter of 1941 with current liabilities (including bank loans) of \$9,055,000 at time of failure. Securities in the hands of the public increased this figure to \$11,852,000. Two-thirds of them, or 37, were manufacturers; 8 were wholesalers; 7, retailers; 1, a construction firm; and 3, commercial service enterprises.

Of these 56 large concerns in serious financial difficulties, 15 sought reorganization through Chapter X of the Bankruptcy Act, 14 sought an arrangement of unsecured debts only through Chapter XI, 4 assigned to creditors, 2 composed their debts out of court, 8 were thrown into receivership, and 13 went either voluntarily or involuntarily into straight bankruptcy. One-half of the large failures thus made use of Chapters X and XI, a distribution which also prevailed last year.

Canadian Failures

Canadian failures in the first quarter of 1941 were considerably under those in the comparable period of 1940 in both numbers and liabilities. Failures dropped from 352 to 274, or 22 per cent,

FAILURES BY DIVISIONS OF INDUSTRY—MARCH 1941 AND 1940

(Current liabilities in thousands of dollars)

	Number			Liabilities		
	Mar. 1941	Feb. 1941	Mar. 1940	Mar. 1941	Feb. 1941	Mar. 1940
TOTAL UNITED STATES	1,211	1,129	1,197	13,444	13,483	11,681
MINING AND MANUFACTURING (total)	188	182	202	3,647	5,983	4,274
*Mining—Coal, Oil, Miscellaneous	12	7	5	394	294	142
Food and Kindred Products	39	25	35	1,051	1,052	849
Textile Mill Products and Apparel	35	42	41	359	600	696
Lumber and Lumber Products	22	24	30	282	765	676
Paper, Printing and Publishing	18	13	19	523	185	267
Chemicals and Allied Products	10	7	11	78	172	336
Leather and Leather Products	5	7	8	56	127	242
Stone, Clay, and Glass Products	4	2	3	25	24	71
Iron and Steel, and Products	5	5	11	215	354	470
Machinery	6	15	8	85	503	109
Transportation Equipment	1	5	4	119	619	107
Miscellaneous	31	30	27	460	1,288	309
WHOLESALE TRADE (total)	105	104	123	2,049	1,611	1,340
Food and Farm Products	51	37	38	1,058	620	524
Apparel	5	4	7	64	42	59
Dry Goods	1	4	5	15	51	58
Lumber, Building Materials, Hardware	10	11	18	257	317	230
Chemicals and Drugs	4	4	8	72	30	66
Motor Vehicles and Automotive Equip.	5	6	8	228	178	91
Miscellaneous	29	38	39	355	373	312
RETAIL TRADE (total)	800	719	754	6,128	4,501	4,647
Food and Liquor	242	201	241	1,223	832	1,046
General Merchandise	44	38	62	313	126	382
Apparel and Accessories	134	145	157	821	852	878
Furniture, Home Furnishings	63	56	39	773	376	233
Lumber, Building Materials, Hardware	53	40	29	637	558	319
Automotive Group	59	56	47	678	335	379
Eating and Drinking Places	112	105	95	849	805	826
Drug Stores	45	31	40	323	315	205
Miscellaneous	48	47	44	511	302	379
CONSTRUCTION (total)	60	58	63	765	836	668
General Building Contractors	15	20	20	338	433	316
Building Sub-contractors	43	35	42	393	286	314
Other Contractors	2	3	1	34	117	33
COMMERCIAL SERVICE (total)	58	66	55	855	552	752
Passenger and Freight Trans.—Highway	13	19	16	400	144	235
Miscellaneous Public Services .....	..	2	..	..	57	..
Hotels .....	..	..	4	..	..	126
Cleaning, Dyeing, Repairing	7	12	10	35	38	139
Laundries	11	7	9	269	120	145
Undertakers	5	5	2	78	40	9
Other Personal Services	6	6	4	13	17	9
Business and Repair Services	16	15	10	60	136	89

* Subtract this item to obtain manufacturing total.

and liabilities from \$3,248,000 to \$2,004,000, or 38 per cent.

All sections of the Dominion shared in the improved conditions except British Columbia, but the decline was more pronounced in the large cities than in the balance of the country. It occurred in all industry groups with the excep-

tion of construction. Manufacturing and retail trade failures were lower by approximately 25 per cent, and wholesale trade and commercial service by 33 per cent. Construction failures rose from 16 to 20.

March failures numbered 90 with liabilities of \$792,000.

HERE AND THERE IN BUSINESS

WHAT'S NEW AS OBSERVED BY THE AGENCY'S REPORTERS

Eye Safety—Invisible rays generated in welding, furnace, and foundry operations can injure a worker's eyes even though he may be wearing dark glasses. First warning of trouble is an irritation described as "hot sand in the eyes." Lenses which absorb these ultra-violet and infra-red rays have been developed for safety use by the American Optical Company, Southbridge, Mass.

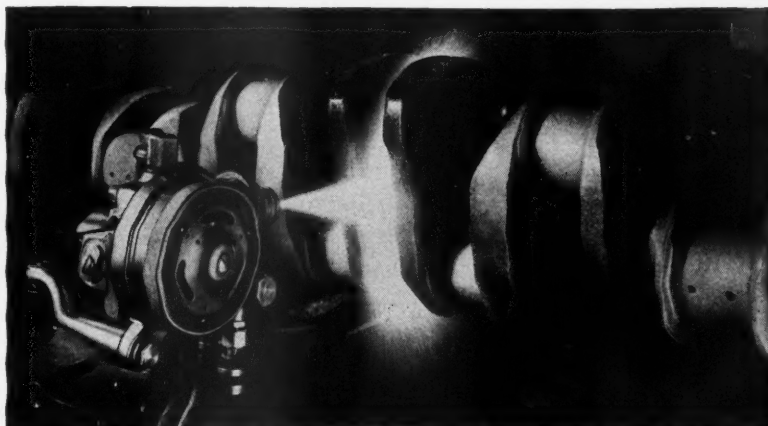
Hipersil—A silicon steel offering several operating economies for transformer cores was announced last month. The new material is said to carry one-third more magnetic flux or "magnetism" in one path, resulting in a transformer that costs less, wastes less electric energy, has less "hum," maintains a more constant voltage, and weighs less.

Hipersil, the new steel, was developed by Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. At present the company makes small (residential district size) transformers with it. When advantages of the metal have been put to use in all types and sizes of Westinghouse transformers, annual savings of more than 5,000 tons of copper and high grade steel alloy are expected.

Auditors—In the 1940 annual report to stockholders of Johns-Manville Corporation, New York City, president Lewis H. Brown discusses company policies and practices with regard to auditors. Briefly, the procedure is outlined as follows:

Non-officer members of the Board of Directors select an Auditing Committee which recommends auditors for appointment and arranges details of their engagement. The Board of Directors makes its selection. After completing the work, auditors appear and answer questions at a meeting of either the Auditing Committee or the Board.

At the annual meeting of stockholders, the auditors are again present to answer questions about their report and about the availability of any information they may have requested from the company.



SPRAY GUN—Worn crankshaft bearing surfaces are built up to their original dimensions by means of steel spray, shot from a new model, controlled power, Metco spray gun, made by the Metallizing Engineering Company, Inc., Long Island City, N. Y.

New Oil—As soothing syrup for the smoking hot bearings of industry, a new type of lubricating oil has two unique characteristics: it doesn't spread over a surface as it heats, but instead clings tenaciously to the original area; second, when heat is sufficient to break down older types of oil, leaving a crust or residue on the bearing, the new oil evaporates cleanly and completely.

The new lubricant is called Caloria, or, when blended with colloidal graphite, Van Caloria. Its maker is the Standard Oil Company of New Jersey. An 100 per cent petroleum product, Caloria is designed to maintain a lubricating film at temperatures above 400 degrees F.

Hot places for Caloria include kiln car, annealing and baking oven bearings; working parts of die casting machines; glass-making machinery bearings; and lubrication of die casting, ceramic and glass molds.

Metal Spray—Although metals have been sprayed on various surfaces for about 30 years, only recently has the process come into extensive use. It's done by a combination of flame, air pressure, and metal wire meeting at the nozzle of a metal spraying gun.

Heat from hydrogen, propane, acetylene, natural, or manufactured gas melts the wire as it is drawn through the gun. A jet of compressed air sprays

the molten metal—aluminum, copper, zinc, stainless steel, tin, or monel. Any metal in wire form may be sprayed on any surface. It's important, however, that the receiving area be properly prepared, by sand blasting, grit blasting, or mechanical roughening.

Applications of the process have been classified by the Metallizing Engineering Company, Long Island City, N. Y., into three general groups. One group includes restoration of the original dimensions of worn bearing surfaces and application of wear-resistant surfaces to soft materials. The second is corrosion resistance. Aluminum especially has proved valuable in retarding heat and salt water corrosion or oxidation due to high temperatures.

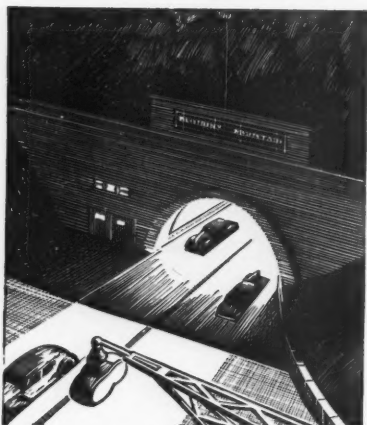
Decorative coatings constitute the third class, covering metallization of glass, stone, concrete, metal, plaster, wood, fabrics, and acoustical materials.

Caterpillar—During 1940 every employee on the hourly payroll of Caterpillar Tractor Company, Peoria, Ill., was appraised at least twice; total appraisals exceeded 35,000. As a result of these, 5,954 rate increases were recommended and approved, averaging 5.2 cents an hour and increasing the company's annual payroll over \$500,000.

Rate decreases averaging 6.5 cents an hour were given 260 employees; 164 voluntarily took decreases in order to

Helping You See THROUGH THE MOUNTAINS

by Westinghouse



• *The recently completed "Dream Highway" from Harrisburg to Pittsburgh is America's finest tunnel superhighway. It's a road you'd love to travel. On this road you can drive 160 miles through the Allegheny Mountains in less than three hours by auto. The same journey a century ago took several days by stagecoach or Conestoga wagon. The turnpike is an old institution, dating back to 1785, but the Americans who traveled it then would hardly recognize the Pennsylvania Turnpike of today.*

• *For one thing, there are no crossroads or railroad crossings. East and west lanes sweep on, each 24 feet wide, providing plenty of space and safety for slowpokes as well as road whizzers. There are no curves over six degrees, no grades over three per cent, though the road cuts through seven of Pennsylvania's highest mountain peaks. Seven tunnels, averaging a mile in length, level out the mountain ranges. You can drive safely at daylight speed through these tunnels, too. This is in large part due to the unusual lighting system designed and installed by Westinghouse engineers.*

• *It is lighter in these tunnels than in most American homes. A new kind of lighting, never before*

used in tunnels, makes this possible. Illumination is provided by 250-watt high intensity mercury lamps, placed in open reflectors. In all there are 1,060 of these units, each of which provides safe driving visibility for well over 1,000 feet.

• *Leaving or entering a tunnel during daylight would ordinarily create a shock for the motorist's eyes because of the difference in brightness. Our engineers found a way to compensate for this change in light. Deep inside the tunnels, the average intensity of light is four footcandles. This is stepped up gradually approaching the exits, reaching 150 footcandles at each portal.*

• *For night driving a further safeguard is provided. Amber-colored sodium-vapor butterfly luminaires give warning that a tunnel lies ahead. First of these units is stationed 1,800 feet out from the tunnel. The spacing is decreased as the tunnel entrance is approached and thus the contrast between illumination inside and outside is safely reduced.*

• *Still another safeguard was called for—an emergency lighting system in each tunnel, ready to go into operation the instant any interruption might occur in the main power system. Batteries charged by gasoline engine turbine generators wait for duty like vigilant watchmen.*

• *As you might imagine, this new superhighway is as popular as it is modern. During its first month of operation 248,412 cars and 14,884 trucks zipped through its brightly lighted tunnels and over its broad concrete roadways, providing some of the world's finest rubber-tired transportation for more than 371,000 American folks.*

• *And that's a pretty good tribute to what concrete, electricity and modern engineering can do.*

Our company manufactures lamps and lighting equipment for practically every modern lighting need. If you have a lighting problem, our local office will be glad to help you. Or write direct to headquarters—about lighting fixtures, the Westinghouse Lighting Division, Cleveland, Ohio—about lamps, the Westinghouse Lamp Division, Bloomfield, New Jersey.

attend a training course or to gain experience in some different type of work. Also, according to *The Year 1940*, the company's review of industrial relations, 4,737 physical examinations were conducted and the average of visits to First Aid Stations was 60,754, about six for each employee. This includes 12,944 calls for treatment of non-occupational injuries and illnesses. Prescription safety glasses were provided for 2,000 employees, Caterpillar Tractor bearing half the basic cost.

Poetry—For several years the International Business Machines Corporation, New York City, has encouraged national art contests, buying the winning paintings and displaying them. Last month the company established a program of poetry awards "to develop cultural understanding in the western hemisphere." Three prizes will be given in each North and South American country, Canada to Chile. Judges are to be selected in each country by its Minister of Education or Academy of Arts and Letters.

Soaring—This month at Elmira, N. Y., the unofficial national capitol of motorless flight, students of soaring are practising the sport in classes under national champion John E. Robinson. (He flew 290 wind-borne miles to Mineral, Va., in six hours.) On June 28 some of the country's best soaring pilots will compete in the Twelfth National Soaring Contest: Elmira to anywhere.

Gliders were made before airplanes, but in this country till recently their ad-

BIG KITE—A motorless glider takes off on the end of a rope reeled in by a winch.



vocates were drowned in a roar of propellers. For a while gliding was conducted as a backyard science, after the fashion of that old poem, "Darius Green and His Flying Machine." No longer: its adherents today are organized into the Soaring Society of America. The thing is a science, compound of aerodynamics and meteorology—but still with liberal portions of old-fashioned luck and derring-do.

According to the Soaring Society's club roster, there are approximately 180 gliding clubs in the United States, mainly in California, Illinois, Michigan, New Jersey, New York, Ohio, and Pennsylvania. The best organized clubs employ an instructor and a skilled mechanic. They own special tow cars or winches for pulling the plane into air currents. Clubs charge a \$10 to \$50 initiation fee and monthly dues of \$1 to \$5. They have a national magazine called *Soaring* and have promoted Congressional bills recognizing gliding as a defense activity.

The soaring meet at Elmira began in 1930 as a project of the city Association of Commerce. Presently it became so big that it was reorganized under a separate, non-profit organization, Elmira Area Soaring Corporation.

DEFENSE SUBCONTRACTING

(Continued from page 12)

ing available to them heretofore untapped sources of supply—of men, materials, and machines.

The Defense Contract Service has established 36 regional offices located in the offices of the twelve Federal Reserve Banks and their 24 branches. Each Reserve District is under the direct supervision of a District Co-ordinator—a business man who has distinguished himself in the business world and whose citizenship and sense of social responsibility are well-known in his own community.

Working directly under the District Co-ordinators are District Managers, men who are essentially production-minded business or technical executives and who are thoroughly conversant with the production problems of large and small industry. Under the direct



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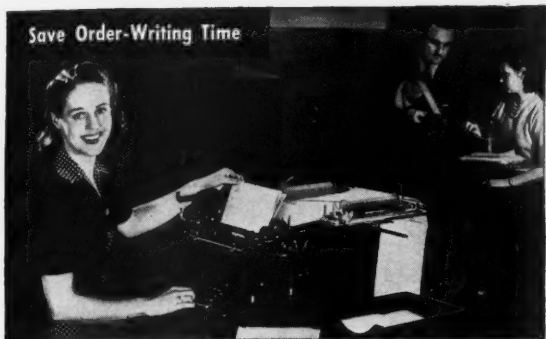
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Use Underwood Elliott Fisher Accounting machines for prompt, accurate figure facts on every phase of your business. Underwood Elliott Fisher makes three complete lines of accounting machines with a wide variety of models in each to meet every figuring need of modern business . . . accurately, efficiently, economically.



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Use Underwood Elliott Fisher continuous form-billing machines. See how these miracle-working machines apply rapid-fire principles to order-writing, billing and other record-writing problems. Save valuable time and promote organization efficiency through the automatic handling of paper forms and carbons.



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has no
Corner on Time!"

If you need money and have Inventory

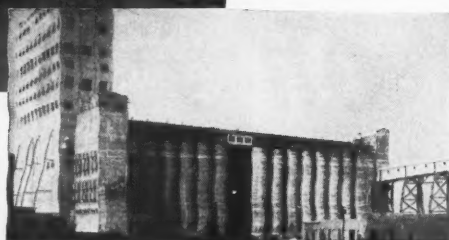
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Inventory financing has grown rapidly during the past five years. Why? Many bankers welcome loans of this type. The borrower gets his money quickly, on favorable terms, and without red tape or bothersome details. Our officials were pioneers in this specialized service. Over 18 years' experience. Our service is nation-wide. **INVESTIGATE Field Warehousing by Douglas-Guardian.**

ILLUSTRATED: A few products that are Field Warehoused



Left: WOOL is very commonly field warehoused—so is COTTON. Inventory financing is growing in the textile field.



Right: GRAIN and grain products—in elevators or other storage provide basis for a large volume of field warehousing loans.



Left: OLIVES in barrels, "in glass in case" and in other forms are extensively field warehoused.



Right: SEEDS in storage are one of the leading commodities field warehoused.

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DOUGLAS-GUARDIAN WAREHOUSE CORP.
Suite 1105—100 W. Monroe St., Chicago, Ill.

- () O.K. to have your Douglas-Guardian man call when in our city, without obligation.
() Send your booklet "Financing the Modern Way."

Company name.....

Address.....

For attention of.....

supervision of the District Managers, there is a technical staff which will carry on field analyses for subcontracting; advise potential contractors in the use and adaptability of plant facilities for defense work; establish contacts for potential subcontractors with existing prime contractors; and generally familiarize business men with the procurement needs of the Army, the Navy, and the other services.

The District Managers will endeavor to work in close co-operation with the procurement and inspection officers of the Army and Navy in each district. Moreover, in each of the twelve Federal Reserve Banks and their 24 branches there will be available a senior bank officer with whom contractors—actual and potential—may consult and advise with reference to their particular financing problems.

Production Problems

Through the co-operation of the five great engineering societies, the Defense Contract Service has arranged for technical advisers at each of the 36 regional offices, who will be available to the District Managers for consultation on any specialized electrical, mining, mechanical, or chemical problem. Similarly, there will be available in each of the districts consulting experts representing the armed services. There are thus available to manufacturers in their own trade territories experts who can advise with them on all phases of their production problems.

It is the desire of the Office of Production Management that farming out should be undertaken on a voluntary basis. That is the democratic way; it is the essential basis upon which our industrial organization has been built—free negotiation and the right to do business with whomever one pleases. But we cannot—and we must not—forget our responsibilities and our obligations.

In the next few months we face our gravest challenge: we have got to push the throttle down full. Time threatens to obliterate our efforts: it can no longer be measured by the hands of the clock. Where the very foundations of our democratic state are menaced, it is too much and too costly a luxury (even for a democratic people) to continue its defense effort on the basis of "business as usual."

RADIO ADVERTISING

(Continued from page 26)

nouncement. Forgotten is the original purpose of the analogy, to emphasize the difference between the leisurely, often roundabout nature of the written word and the terse directness of "the way people speak." Forgotten too are the campaigns of motorists and club-women against the very multiplicity of billboards.

Forgotten that is, by some. The more astute have adopted the strategem of weaving their commercials into the body of the program. But for many this probably cannot be the ultimate solution. In some programs which are both humorous and blessed with an entertainer part salesman—Jack Benny seems to be one—this technique has had considerable success. In other programs more serious it may prove only to be a greater annoyance than a straight commercial sandwiched between halves of the entertainment.

On even more sandy ground is the one-minute spot commercial, the hitchhiker of the trade.¹¹ To make it a more palatable sales message, to sustain the lagging interest of a listener who has already heard the concluding plug of the preceding program, followed by a station announcement, one agency has developed a series of spots which are really 60-second variety shows. Of the available minute the commercial takes up only a part.

This same series of spots, which pull their own weight in the entertainment boat, illustrate too the flexibility of transcribed programs. Recorded for a nationally advertised ale, one set of transcriptions was designed to promote the ale on the Pacific Coast in competition with western beers. Another, somewhat different, set of transcriptions will promote the ale in New England in competition with other ales.

Regional broadcasting has added further networks by the dozen to the best known big four: NBC Red, NBC Blue, Columbia, and Mutual. Moreover, a multitude of regional "groups" within the major network systems, make possible an almost infinite num-

¹¹ "Spot" in the radio idiom can also mean single station broadcasting—as opposed to network, or multiple-station, broadcasting.



Meet Hollywood's Number 1 creative man—KING VIDOR—Director-Producer for MGM . . . We found Mr. Vidor discussing—with a script girl—"rushes" from "COMRADE X," MGM's spy-thriller starring CLARK GABLE and HEDY LAMARR.



The projection room—where waste footage is cut, each scene edited, action speeded. Many Academy awards are actually won here. Mr. Vidor dictates every direction, note, detail to his Ediphone. They're recorded quickly, accurately, even with inflections.



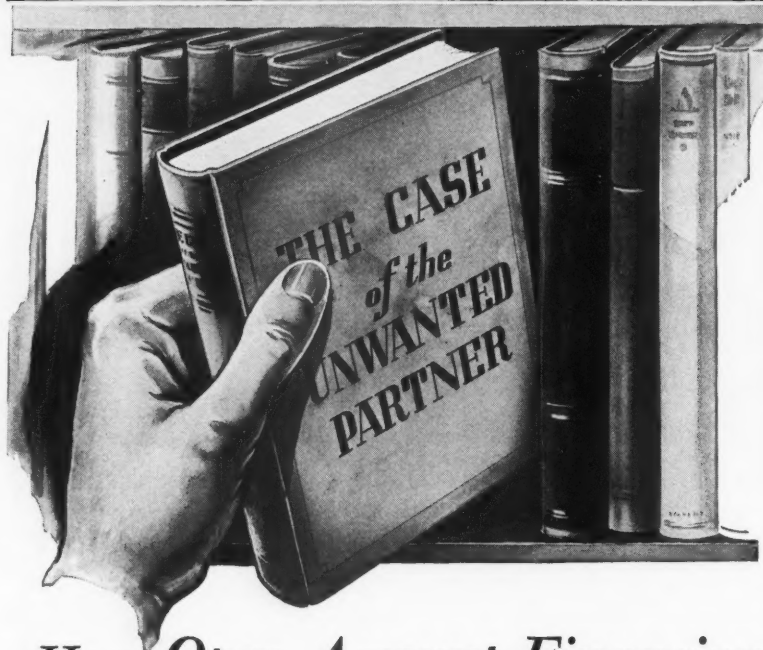
Here's King Vidor recording scenes and dialogue from J. P. Marquand's best-seller, "H. M. Pulham, Esquire"—his next picture for MGM. Here again, Ediphone saves valuable time, steps up efficiency.

Why don't you discover how much more you can do in a working day with the Edison Voicewriter? No "overtime," either, when you keep an Ediphone at home (as Mr. Vidor does). And your secretary will thank you when you phone "Ediphone," your city, or write Dept. D5, (address below) for a demonstration.

EDISON
VOICEWITER
Ediphone

Thomas A. Edison, Inc., West Orange, N. J. (or) Thomas A. Edison of Canada, Ltd., 610 Bay St., Toronto

GOOD BUSINESS NEWS



How *Open Account Financing* solved the problem for Mr. X*

ABOUT January 1st, 1938, Mr. X started in business, investing \$20,000 and secured a small line of bank credit.

At year's end his statement showed:

GROSS SALES	\$185,031
MR. X'S SALARY	4,800
NET LOSS	3,010

However, by this time, sales were mounting rapidly, and the outlook was excellent, though it was going to require more capital. So he took in Mr. Y as an equal partner. Mr. Y. put \$20,000 into the business.

The partnership was not happy. The partners couldn't agree on management. Mr. Y wanted to get out. Mr. X wanted to buy him out. The problem was to find the money without bleeding the business of its capital. The solution was, **COMMERCIAL CREDIT OPEN ACCOUNT FINANCING**.

In September, 1939, Mr. X, after consultation with a Commercial Credit Corporation officer, worked out a plan of action. He took an advance on the company's receivables, paid off his partner, and was again the sole

owner. The statement at the end of 1939 showed:

GROSS SALES	\$474,000
MESSRS. X & Y'S SALARIES	14,800
NET PROFIT	3,611

Still financing through his accounts receivable and inventory loans, Mr. X increased his business in 1940. And on December 31st, he looked with satisfaction at a statement that showed:

GROSS SALES	\$750,400
MR. X'S SALARY	25,000
NET PROFIT	2,962

OPEN ACCOUNT FINANCING is doing a fine job for Mr. X.

* * * * *

If you have any problems in connection with your financing—uncertainty as to future rates—uncomfortably close credit limits—expensive delay in arranging loans—let us show you how **OPEN ACCOUNT** financing can be utilized to substantial advantage. No obligation—just write for free booklet, or ask a representative to call. Address Dept. DR.

*A factual case from our records. The figures can be certified.

COMMERCIAL CREDIT COMPANY

"Non-Notification" Open Account Financing

BALTIMORE

BOSTON NEW YORK CHICAGO SAN FRANCISCO LOS ANGELES PORTLAND, ORE.

CAPITAL AND SURPLUS MORE THAN \$60,000,000

ber of combinations of stations to match the geographic peculiarities of marketing problems. To the time-buyers who manipulate the combinations it is only the beginning of knowledge to recall that one hour of night-rate time on the basic Red network (26 cities) costs about \$10,000, on the basic Blue (25 cities) about \$8,000, on Mutual (18 cities plus Colonial—New England—and Don Lee—West Coast—networks) about \$8,000, and on Columbia (26 cities) about \$10,000.

Both increased use of transcriptions and greater emphasis on the fitting of programs to regional needs and preferences are significant recent trends. In 1928 gross revenue from time sales by individually owned stations and regional networks was only 27 per cent of the revenue of national networks. Since 1937 gross time sales by the former have exceeded those of the latter.¹² In 1930 almost two-thirds of the program time on NBC networks originated in New York City. In 1938 only 36 per cent originated in New York; Chicago accounted for 23 per cent; San Francisco for 16 per cent.

There are still other evidences that radio is outgrowing its adolescence, that with maturity it is coming to know itself. As data on listening habits have accumulated it has been possible to determine more accurately what income classes like what entertainment. In the first six months that "Information Please" was sponsored by Canada Dry its rank (Crossley) in program popularity was thirtieth. But it was ninth in the upper income group (thirty-second in the middle income group, (forty-seventh in the lower income group). Clearly this mass-market advertising medium has a class market too.

Program Suitability

The present tendency toward choosing programs for their appropriateness, matching programs with the character of an advertiser's reputation and the nature of his product, is one which seems certain to continue. That this appropriateness can be attained demonstrates both that radio is a flexible advertising medium and that measures of its potentialities and accomplishments are steadily, if gradually, improving. The better yardsticks do not alter its essential quality, which still is show

¹² See Footnote 2.

business. They can, notwithstanding, make it show business with a higher degree of predictability.

Meanwhile, as techniques for working with standard, or AM, broadcasting become perfected, new developments—frequency modulation, television, and facsimile—raise new questions about the future of radio advertising.

The 40 frequency-modulation stations authorized by the FCC at the beginning of the year lead a development which promises, in near-staticless reception, more enjoyment for listeners. For advertisers it seems now to presage few significant changes.

Replacement Gradual

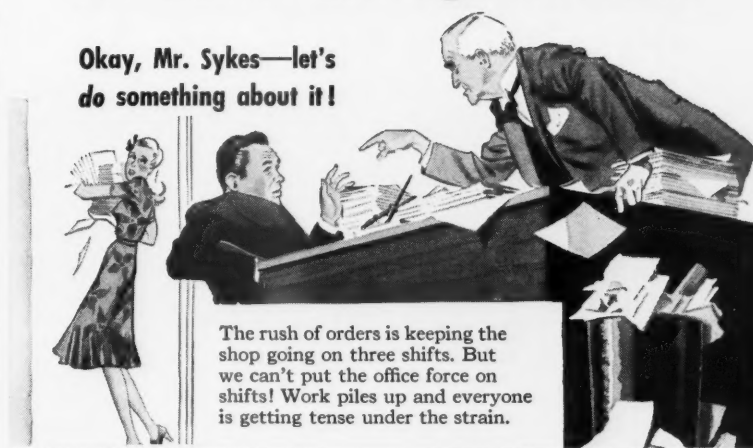
FM broadcasting is kin to television to the extent of characteristics which limit its sending range to a radius of about 75 miles. Ultimately it can result in more broadcast stations, both to relay FM impulses and to serve smaller communities which do not now have transmitters because of the scarcity of broadcasting channels. Further emphasis on fitting programs to local requirements may follow. But apart from this, the gradual displacing of amplitude-modulation (AM) broadcasting by FM probably will not alter the problems of conceiving, promoting, and producing a radio show or of measuring its results.

The very considerable changes implicit in the 36 experimental television stations licensed to operate at the beginning of 1941 will be some time in coming. First must come vast construction of transmitting stations and connecting links, coordination of sizable new organizations, and methods of producing programs at reasonable cost. Much of the delay will depend too upon purchase of receivers by the public and that in turn will depend upon the economic condition of the country.

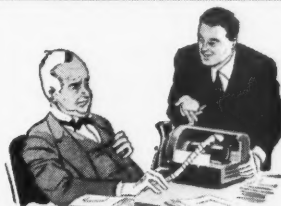
Also apparently still distant in the future is facsimile broadcasting, the transmission of the printed word from point to point, from radio-newspaper office to rural homes, from bank to bank, from "direct mail" advertisers to RFD consumers. The impact of facsimile on advertising, and on the printing trades, is potentially tremendous, but like television it seems destined to be a long time coming. The development which may come soonest, FM, will come the most unobtrusively.

"I'm sick of hearing that word!"

Okay, Mr. Sykes—let's do something about it!



You're swamped...like everybody else. Look at your secretary. While you've been dictating to her, her other work has piled up. And now she has to type all the dictation you've just given her.



As Office Manager, I feel responsible for both of you—your health and the vital work you do...so I'm taking the liberty of breaking the...excuse me...work jam...

...of doing my duty by ordering a Dictaphone for you to try. You can give this modern dictating machine all your dictation—letters, notes, memos, speeches, anything—without calling Miss Blake from the other important work she does for you.



Dictaphone is always ready *when* you want it. It's easy to use and it doubles your ability to get things done. By eliminating old two-person dictation, you expedite the flow of work for everybody and break that—beg pardon—that BOTTLENECK!

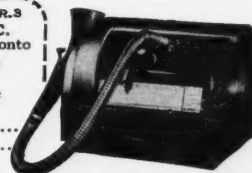
If you are hearing too much about bottlenecks in your own organization, why not try Dictaphone and see how this modern dictating machine effectively breaks work jams.

DICTAPHONE

Dictaphone Corporation, 420 Lexington Ave., N. Y. C.
In Canada: Dictaphone Corp. Ltd., 86 Richmond St., W., Toronto

- ☐ I should like to see the Dictaphone movie, "What's an office anyway?" showing how bottlenecks can be eliminated.
- ☐ I should like to try a Dictaphone Cameo Dictating Machine in my own office without obligation.

Name.....
Company.....
Address.....



The word DICTAPHONE is the Registered Trade-Mark of Dictaphone Corporation. Makers of Dictating Machines and Accessories to which said Trade-Mark is Applied.



For the utmost in
deluxe travel to and from
California



Super Chief and Chief

These two superb Santa Fe streamliners... providing smooth speed, quiet beauty, restful comfort, and excellent Fred Harvey cuisine... are frankly designed for the enjoyment of discriminating travelers on journeys between Chicago and California.

The *Super Chief* is the only extra-fare, all-standard sleeping car streamliner operating on a 39¾-hour schedule between Chicago and Los Angeles.

The *Chief* is the only extra-fare, daily, all-Pullman streamliner between these two points.

For a descriptive booklet, containing natural color photos of the ultra-modern lightweight equipment used on these magnificent streamliners, just write to address below.

T. B. GALLAHER
Passenger Traffic Manager
988 Railway Exchange Building
Chicago

THE BUSINESS BOOKSHELF

BUSINESS . . . FINANCE . . . ECONOMICS . . . GOVERNMENT

OUT of an inquiry conducted for the Federal Trade Commission and the Temporary National Economic Committee comes a book with the arresting title *Big Business, Efficiency and Fascism*, by Kemper Simpson. (Harper & Brothers, 213 pages, \$2.50.)

The author is credited with preparation of a TNEC monograph on *Relative Efficiency of Large, Medium-Sized, and Small Business*. He repeats data from this and advances three contentions: As competition is restricted or destroyed an economy becomes less "democratic" and falls prey to "fascist control." Unless big business in the United States is restrained, it will eventually destroy competition. Big business on the ground of efficiency alone has not justified itself.

Big Business, Efficiency and Fascism is divided into two parts: "The Argument" and "The Evidence." Mr. Simpson says at the end of Part I that evi-

dence in Part II proves the breaking up of most giant corporations would mean no great sacrifice; advantages of large scale production and distribution could be maintained; efficiency would be improved.

The Petroleum Industry, by Ronald B. Shuman (University of Oklahoma Press, 312 pages, \$3) considers its subject from many sides and in many lights: among them demand, development, and production of crude oil; refining and manufacturing; transportation and storage; marketing; financial policies, investment, and taxation.

Personnel management and labor relations, international trade, natural gas, and finally the touchy one of petroleum conservation and control are reported. The text is buttressed with statistics and carries some quotations from testimony before the Temporary National Economic Committee.

CURRENT READING

BOOK	SUMMARY
COMMON STOCKS AND BONDS AS LONG TERM INVESTMENTS, by Leo Spurrer. University of Chicago Press, 99 pages, \$1.	Sixteen tests of the theory that for long-term investments high grade common stocks have an advantage over high grade bonds.
THE FLOW OF BUSINESS FUNDS AND CONSUMER PURCHASING POWER, by Ruth P. Mack. Columbia University Press, 417 pages, \$3.75.	A study of the relationship between current income distributions to consumers and consumer goods offered for sale; includes effect of decisions by corporation officials.
FOUNDATIONS OF AMERICAN POPULATION POLICY, by Frank Lorimer, Ellen Winston, Louis K. Kiser. Harper & Brothers, 192 pages, \$2.50.	An inquiry into basic objectives of American population policy, with a discussion of population trends and the relation to them of economic and social conditions.
THE BANK LIBRARY, by Mary P. McLean. Special Libraries Association, 26 pages, 75 cents.	A list of outstanding publications in the financial field since 1937. Two or three sentences reflect the content or purpose of each.
ANTICIPATIONS, UNCERTAINTY, AND DYNAMIC PLANNING, by Albert Gailord Hart. University of Chicago Press, 98 pages, \$1.	An economist considers the operations of a business firm, studying sales forecasts, price fixing, capital, with emphasis on the time element in a firm's planning.
ECONOMIC MOBILIZATION, by Douglas Block, Lange, Harbison, Lewis. American Council on Public Affairs, 48 pages, 75 cents.	Defense and war costs should be met from idle resources and financed by creation of additional monetary purchasing power. When full employment is reached, financing should be by taxation.
SEVEN KEYS TO BRAZIL, by Vera Kelsey. Funk & Wagnalls, 334 pages, \$3.	Not primarily a travel guide, this book moves, chapter by chapter, through the very different cities and sections of Brazil, reporting history, culture, folkways, geography, and economics.
RECENT AMERICA, by Henry Bamford Parkes. Thomas Y. Crowell, 664 pages, \$4.50.	America since 1900, including economic and sociological phases. Familiar details have been pruned with a merciless hand to present an objective landscape.

IN JANUARY the *International Reference Service* of the Bureau of Foreign and Domestic Commerce, United States Department of Commerce, was started. It presents data on economic conditions in foreign countries, including tariffs, quotas, documentation, foreign commercial regulations, and exchange. Number one, eight pages, describes marketing areas in Brazil; number two, eight pages, is about documentation, consular, and customs requirements for Colombia. One copy is five cents, a year's subscription, \$6.

Last Fall the Bureau also began publication of an *Industrial Reference Service*, available in fourteen parts covering all commodities. This costs \$15 annually. At about the same time a magazine called *Foreign Commerce Weekly* was issued, replacing the Bureau's *Commerce Reports*. Subscription to this is \$4.50 a year.

Fivefold Aid to Britain, by Fritz Sternberg (John Day, 76 pages, \$1) attempts to determine the exact amount of assistance Britain needs to defeat the National Socialists in Germany. In part the book is laudatory of German production. The author uses pictorial statistics to show the extent of American aid required. Chapter headings declare "America's Aid to Britain Is Less than Occupied Europe's Tribute to Hitler" and "Britain Needs 25 Million Tons of Steel, 1,500 Planes, One Billion Dollars in Goods from the U. S. Monthly."

THE planning and taking of a physical inventory and the use of that inventory as a tool of management are discussed in *Taking The Merchandise Inventory*, by James J. Jackson. (Chemical Publishing Co., 267 pages, \$4.) Mr. Jackson outlines fundamental principles of the physical inventory. He explains its value as a basis for financial reports and the other data needed for business operations. Subjects covered include use of symbols, preparation for inventory, personnel and organization, inventory instructions, computing inventory, the electric punched card accounting method, and verification of inventory. Although its title includes the word "merchandise," the text is not specifically about retail inventory, but seems more concerned with problems of a manufacturer's inventory.



AT YOUR PROSPECTS' *Personal Attention* YOUR LETTERS WILL GET OUTSTANDING RESULTS

The AUTO-TYPIST gives your letters that sharp-shooting directness that commands the attention of the recipient...because they are "aimed" at his interest. • Today business must eliminate generalities and vagaries if profitable results are to be secured. Some of the country's most successful companies are proving daily, the effectiveness of AUTO-TYPED letters ...for sales...collection...adjustment...follow-up...and routine work. • One AUTO-TYPIST will give you 200 letters per day (that's volume!)...and each one specifically "aimed" at the individual recipient (and that's sharp-shooting!)...all on your own typewriter—and it still leaves your operator ample time for her routine duties. • So, in one fell swoop you can banish the ineffectiveness of impersonal mailings... get the results of individually written letters...and save enough in dictating and transcribing costs to more than pay for your AUTO-TYPIST! • The coupon will bring you an AUTO-TYPED letter answering your specific inquiry together with completely descriptive literature on the AUTO-TYPIST



The Dual Selector
AUTO-TYPIST
is a brute for coverage... it will accommodate 400 lines of material, which can be keyed into any number of paragraphs and combinations of letters. Eliminates dictation and copying time... avoids errors and erasures and cuts typing cost by more than 80%.



AUTO-TYPIST

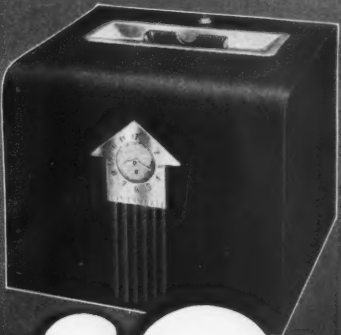
610 N. CARPENTER ST. • CHICAGO
120 GREENWICH ST. • NEW YORK CITY

Letters as individual as your fingerprint

Show us the type of work the AUTO-TYPIST turns out and tell us more about how it can serve us profitably. No obligation on our part.

COMPANY _____
TITLE _____
ADDRESS _____
CITY _____ STATE _____

AUTHENTIC • RELIABLE
For Plant and Office



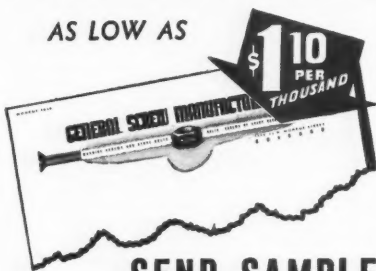
CINCINNATI
Time Recorders

Dignified, simplified method of time and job recording for plant and office use. Designed and built by pioneers in the development of Time Recording Machinery for almost half a century.

Built and Guaranteed by
THE CINCINNATI TIME RECORDER CO.
Cincinnati, Ohio
Branch Offices in Principal Cities

LITHOGRAPHED LETTERHEADS

AS LOW AS



SEND SAMPLE

OF YOUR LETTERHEAD AND LET US
SUBMIT A MODERNIZED DESIGN FREE

★ Through mass production on the biggest and latest equipment, we offer fine quality work at prices that surprise our new customers and continue to hold our old ones. Not only on letterheads, but on circulars, folders and forms as well!

★ Whether or not you want your present letterhead re-designed, send us a line and say: "I'd like to see your folder of famous letterheads". With it we'll send our all-time-low price quotations on quality work. And, of course, you won't be obligated to buy.

UNIVERSAL LITHOGRAPHING CO.
Dept. 75, 4307 Diversey Avenue, Chicago, Ill.

YEAR of the PROPHETS

(Continued from page 19)

—paper currency of State banks, toll roads, and canal companies, all subject to a variety of discounts. Circulation of American, English, and some Spanish specie. A bookkeeper had to be an expert in foreign and domestic exchange. At times, an earned profit was wiped out by paper currency depreciation.

2. Lack of dependable and trained middlemen through whom to distribute goods to country traders. The evolution of the jobber was an extended experiment in "trial and error."

3. Lack of rapid communication and transportation. The toll roads, canals, and rivers were the means of transport. Rail trackage in 1840 was 2,818 miles and 717 miles were built in 1841. Very little of this steam transportation was west of the Appalachians, although considerable mileage was planned.

4. Lack of American gold and silver as a currency stabilizer. California's gold was not discovered until 1848. Some gold was coming from mines in North Carolina and Georgia. Considerable silver came into the States from Mexico. Forty thousand fine ounces were mined in the United States in 1841, as against 418,965 in 1850.

5. Lack of trained bankers whose career was financial rather than commercial. There were many competent bankers at the time, but bank legislation encouraged a wide variety of adventurers, interested only in creating wealth by the alchemy of printing ink.

6. Lack of adequate mercantile laws, and especially a properly drawn national code covering bankruptcy liquidations. The Bankruptcy Law of 1841, in operation only five months, was the sport of thieves.

Tappan's Proposal

When Lewis Tappan proposed his centralized bureau of credit information in 1841, he was aware of these hazards to a merchant's capital and the conduct of normal trade. His idea was American in concept, and it belonged to 1841 as a year of important ideological propositions. When Brisbane and the Fourier adherents to a communal life would have rid the nation of its

commercial ills by eliminating the mercantile system, Tappan offered to cure, or at least alleviate, the pain in the innards of business life by his prescription for the examination of credit risks.

Prior to 1841, the granting of credits was a highly personal affair in which facts were few, and hope and intuition were the guides to judgment. The country trader, unlike the city retailer, was an adventurer and an integral part of the pioneer life. If he lost, he was quite willing to transfer the bad luck to his source of supply and move on.

The prime objective of The Mercantile Agency system was to stabilize the granting of credits. It also served as the liaison and the impartial third party by which the remote traders of the hinterland could get merchandise promptly, and by which the supplier could ship with reasonable confidence. This agency of credit communication, abetted by the improvement of transport, had a tendency to shorten terms of sale—always a problem, as James Beebe, a merchant of the '40's explains in his circular.

Credit Terms

"The question of length of credits is now attracting attention, and believing the present a favorable time for the revision of a system fraught with serious evils both to buyer and seller, we shall, from this date, aim to offer sufficient inducements to our customers, to limit the term of credit to SIX MONTHS. Those most interested, and who can with propriety claim every advantage in purchasing that can be given, approve the course submitted. We shall cheerfully allow to our customers the full market rates for money, as far as they may choose to avail of this advantage by pre-payment."

The Tappans, Lewis and his merchant brother Arthur, were originally New Englanders who came to New York and established a successful silk importing house. Benjamin Franklin was a granduncle on their mother's side. The Tappans were friends of William Lloyd Garrison and campaigned vigorously in the anti-slavery cause in New York City. Eventually

Lewis Tappan's interest in the cause of the black man became his prime passion and in 1849 he withdrew from The Mercantile Agency which he had founded.

The Tappans were early friends of Lincoln and were among his first supporters for the presidency. Lincoln dined with them on his first visit to New York. Tappan's credit reporting idea, in the abler hands of Benjamin Douglass and R. G. Dun, and their competitor, John M. Bradstreet, had a growing influence in reforming and stabilizing commercial credit. All busi-



ness benefited, too, when the Government decided to take care of its own money in the legislation of 1846, and to provide a national banking system in 1863.

The year of 1841 was a threshold to a period of social and cultural ferment in which the American mind was evolving as a separate identity. It was the beginning of national awareness, or perhaps, self-consciousness. Energy and initiative were invested in widely divergent channels.

Inventors were toying with a host of revolutionary gadgets. Morse had just received a patent on his telegraph and was looking for capital. On October 18, 1842, he laid the first submarine cable from Castle Garden to Governor's Island, but a ship dragging anchor sundered it the following morning. Steam power was spreading into many industrial uses,—printing presses, machine shops, and textile mills. By 1841, over 250,000 spindles were driven by power in the United States, most of them in the New England plants where water power was available. The development of the industrial cities of New England brought a cry of dismay from Thoreau who was not in sympathy with the regimentation of labor.

Considerable study was given to the employment and labor conditions in the mill towns, and in 1841 the Massachusetts legislature drafted a bill limiting children to a ten-hour working day. It became a law in 1842.

Railroad building gathered momentum in 1841. The first section of the Erie Railroad began running between the Piermont and Ramapo, along the New York and New Jersey border. The American Express Company opened its service between Albany and Buffalo in 1841. Ocean commerce took a long step forward when the steamships *Sirius* and *Great Western* arrived from England in 1838. The clamor immediately began for the establishment of regular trans-Atlantic schedules. Samuel Cunard started his line to Boston in 1840. The new steamer *President* disappeared in 1841 with 135 passengers on its first voyage between New York and Liverpool. Tyrone Power, actor and great-grandfather of the current Hollywood star, was one of the passengers lost.

American clipper ships were ranging far into the commercial routes; the whaling industry was at its peak. In 1840, the American, Captain John Wilkes, had landed at Antarctica. During the year 1841, 495 gadgets were invented, and the first steam fire engine built by a Mr. Hughes after a model made by Captain John Ericsson, of *Monitor* fame.

Scholars and Poets

In 1841 also, literary affairs were percolating and writers were searching for a new point of view; but there was no authentic interpreter of the hurly-burly of the day. James Russell Lowell's first poems, *A Year's Life*, were being published. So were Longfellow's *Ballads and Other Poems*, and Fenimore Cooper's *Deerslayer*. Walter (not yet Walt) Whitman was writing naïve stories in the *New World*, edited by Park Benjamin. According to the *New York Atlas*, "the beautiful cigar girl," Mary Cecelia Rogers, was murdered on July 28, 1841 in Hoboken, just across the Hudson. Edgar Allen Poe read the account and wrote his story, *The Mystery of Marie Roget*, one of our first American detective stories.

During 1841 the Reverend Rufus Wilmot Griswold was reading proof on his *Poets and Poetry of America*, our

HOW EMPLOYEES CAN GET LOANS FOR EMERGENCIES

DO employees ask your company for loans in emergencies? Is it a problem for you to take care of all your workers' needs?

How best to help families worried by expenses too big to be met out of savings or current income has puzzled many executives—and many social scientists. The scientists have sought a solution in the service provided by the modern family finance company. For years they have studied the small borrower's problem from every angle. Their recommendations have guided the lawmakers responsible for modern small loan legislation.

Money for any worthy purpose

Most industrial states have now passed Small Loan Laws. These laws, written to serve and protect the small borrower—make possible the operation of a company like Household Finance.

At Household Finance the responsible worker can borrow up to \$300 for any worthy purpose. No wage assignment is taken. No endorser is required. The worker obtains money to tide himself over in a simple, private transaction.

Charges below lawful maximum

A monthly repayment plan helps the borrower to get out of debt without strain or sacrifice. The table below shows sample repayment schedules. Installments include charges at the rate of 2½% per month (less in many territories). These charges are substantially below the maximum allowed by the Small Loan Laws of most states.

WHAT BORROWER GETS

	WHAT BORROWER REPAYS MONTHLY				
	2 paymts	6 paymts	12 paymts	16 paymts	20 paymts
\$ 20	\$ 10.38	\$ 3.63	\$ 1.95		
50	25.94	9.08	4.87		
100	51.88	18.15	9.75	\$ 7.66	\$ 6.41
150	77.82	27.23	14.62	11.49	9.62
200	103.77	36.31	19.50	15.32	12.83
250	129.71	45.39	24.37	19.15	16.04
300	155.65	54.46	29.25	22.98	19.24

Above payments include charges of 2½% per month and based on prompt payment are in effect in seven states. Due to local conditions, rates elsewhere vary slightly.

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WRITE FOR NEW FOLDER

first worthwhile anthology. He complained that the affections of the people are passing from "the simplicity of a democracy to the gilded shows of an aristocracy." His rough estimate is interesting for the names stated as well as omitted, a few of which have grown in stature, while most have dwindled into items for the research student.

The anthologist of 1841 said, "Although America has produced many eminent scholars and writers, we have yet but the beginning of a National Literature. Edwards and March, in *Metaphysics*; Dwight, Emmons, Alexander, Stuart, Bush, Williams, Robinson, Norton, Hodge, and Barnes in *Theology*; Hamilton, Madison, Webster, and Calhoun in *Politics*; Story, Kent, and Wheaton, in *Jurisprudence*; Prescott and Bancroft in *History*; Brown, Cooper, Irving, Kennedy, Bird, Ware, Hoffman, and Hawthorne, in *Romantic Fiction*; Bryant, Dana, Halleck, Longfellow, Whittier, and others in *Poetry*; and Audubon, Channing, Everett, Emerson, Bronson, Verplanck, and many more in the various departments of literature, have written for the coming ages. But too few of them, it must be confessed, are free from that vassalage of opinion and style which is produced by a constant study of the literature of the country from which we inherit our language, our tastes, and our manners."

Poe is included in the anthology, but not given especial mention. Whitman is omitted; he had not yet developed his distinctive style. James Bayard Taylor, later Bayard Taylor, is mentioned as one of the youngest and most promising authors of the country. One authority reports that in the twelve years ending with 1841, 1,115 books were published, of which 623 were from original American manuscript and 492 were foreign reprints.

Coming of Barnum

In 1841 Phineas T. Barnum acquired the American Museum at 243 Broadway, much to the alarm of its tenants and neighbors. Barnum introduced the new psychology of showmanship. He was the emotional billboard of the time. Equally successful as nature faker and bamboozler, he knew all the formulas for baiting people's curiosity. Barnum's first promotional success was the exploitation of Tom Thumb. Jenny

Lind earned half a million under his management. His museum in 1841 was father to the circus, pioneer of the spectacle, its owner the evangel of bunkum.

While there had been considerable display and directory advertising by progressive merchants in the first third of the nineteenth century, it was not until 1841 that Volney B. Palmer, a coal merchant, founded in Philadelphia what is thought to be the first advertising agency. He had observed the necessity for professional aid to advertisers in the preparation of copy; and advertisers were just becoming aware that they needed help in layout and typography. It was Palmer's experience on the Mount Holly, N. J., *Mirror* that brought the need for advertising agents to his attention.

Myriad Beginnings

A century ago music lovers were discussing the need for a central body, and the Philharmonic Society was formally organized at New York the following year. Its first concert was held on December 7, 1842. The Stuyvesant Medical School was established by New York University in 1841. Fordham University enrolled its first student that year. In the period of 1840 to 1850 over thirty colleges were established in the United States.

Papers of 1841 were reporting the finishing touches of the New York City Croton watershed project. Manhattan had been getting most of its water from the pond called the Kolsch or Collect, since filled in and now the site of the New York State Building, erected in 1940. To quote Mr. A. Greene, a local journalist, in 1837, "There is not perhaps a city more destitute of the blessing of good water than New York." The Reservoir and Aqueduct were completed in 1842, and brought mountain water 44 miles from the Croton dam. The Reservoir was on the side of the present New York City Public Library at 42nd Street and 5th Avenue.

All in all, 1841 was an exciting year, with a sharp earthquake to give credence to some dire warnings of the "hell and brimstone" caterwaulers on the street corners of Manhattan. William Miller, a religious leader, considered it the herald of the doom which was to envelop the world in 1843. Maybe he erred only by a century.

OVER THE EDITOR'S DESK

ABOUT CONTRIBUTORS . . . AND A CORRECTION

OUR subcontracting author, Peter R. Nehemkis, Jr. (page 5), after a rather unusually brilliant history as a student at Amherst, Swarthmore, and the Yale Law School, stepped right into big national affairs.

After graduation, in 1934, he participated as one of the assistants to Mr. Stanley Reed, general counsel, Reconstruction Finance Corporation, in the preparation of several celebrated New Deal briefs including the "Gold Clause" case. Soon after that, under Mr. A. A. Berle, Jr., he assisted in the preparation



HARRIS & EWING
PETER R. NEHEMKIS, JR.

of a plan for acquisition by the City of New York of the rapid transit facilities of the city. In the Spring of 1937 he joined the legal staff of the Securities and Exchange Commission and as Special Counsel had much to do with the Commission's presentation before the TNEC.

Last Fall he joined Mr. Donald M. Nelson's staff in the Office of Small Business Activities of the National Defense Advisory Commission. More recently he has been Special Assistant in the Defense Contract Service.

IN THE week of May 3 the Federal Communications Commission provided two bulging and potent footnotes to "Radio Is—As Radio Advertising Does," the article beginning on page 20. The Commission authorized full commercial operation of television beginning July 1, and moved to cause National Broadcasting Company to drop one of its networks.

Eight regulations which indicate con-

siderable changes in the organizational line-up of the radio industry were also approved. Their effect is to end ownership of two networks by one broadcasting company; to end five-year contracts between stations and networks; to abolish contract clauses demanding exclusive use of network programs; to prevent licensing of two stations in the same area to the same network.

IN THE December number there appeared on one of the "Here and There in Business" pages a statement—incidental to another matter—that raw phosphorus had been purchased from the TVA. The Tennessee Valley Authority was thus confused with its development area. The exactly correct statement is, of course, that the chemical was purchased from a company in the TVA area. We are sorry.

MANY are the interesting ways of making a livelihood. Ralph Lewis Moran, librarian and compiler of historical data on 19th century business and industry, is a research scholar who keeps busy telling the 20th century what happened in the formative years in which America has suffered its industrial growing pains. Mr. Moran thumbed his way back a hundred years through dusty folios in helping Mr. Sullivan check some of the events for his article "1841—Year of the Prophets."

DUN'S REVIEW

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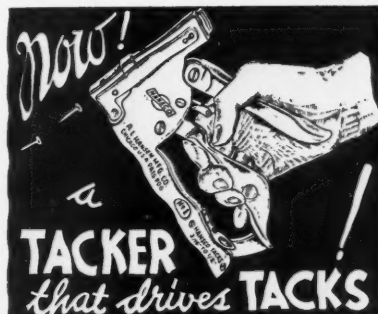
Willard L. Thorp, Editor; Norman C. Firth, Managing Editor and Business Manager; Edwin B. George, Walter Mitchell, Jr., A. M. Sullivan, Associate Editors; J. A. D'Andrea, Statistician; Clarence Switzer, Art Director; H. C. Daych, Advertising Manager.

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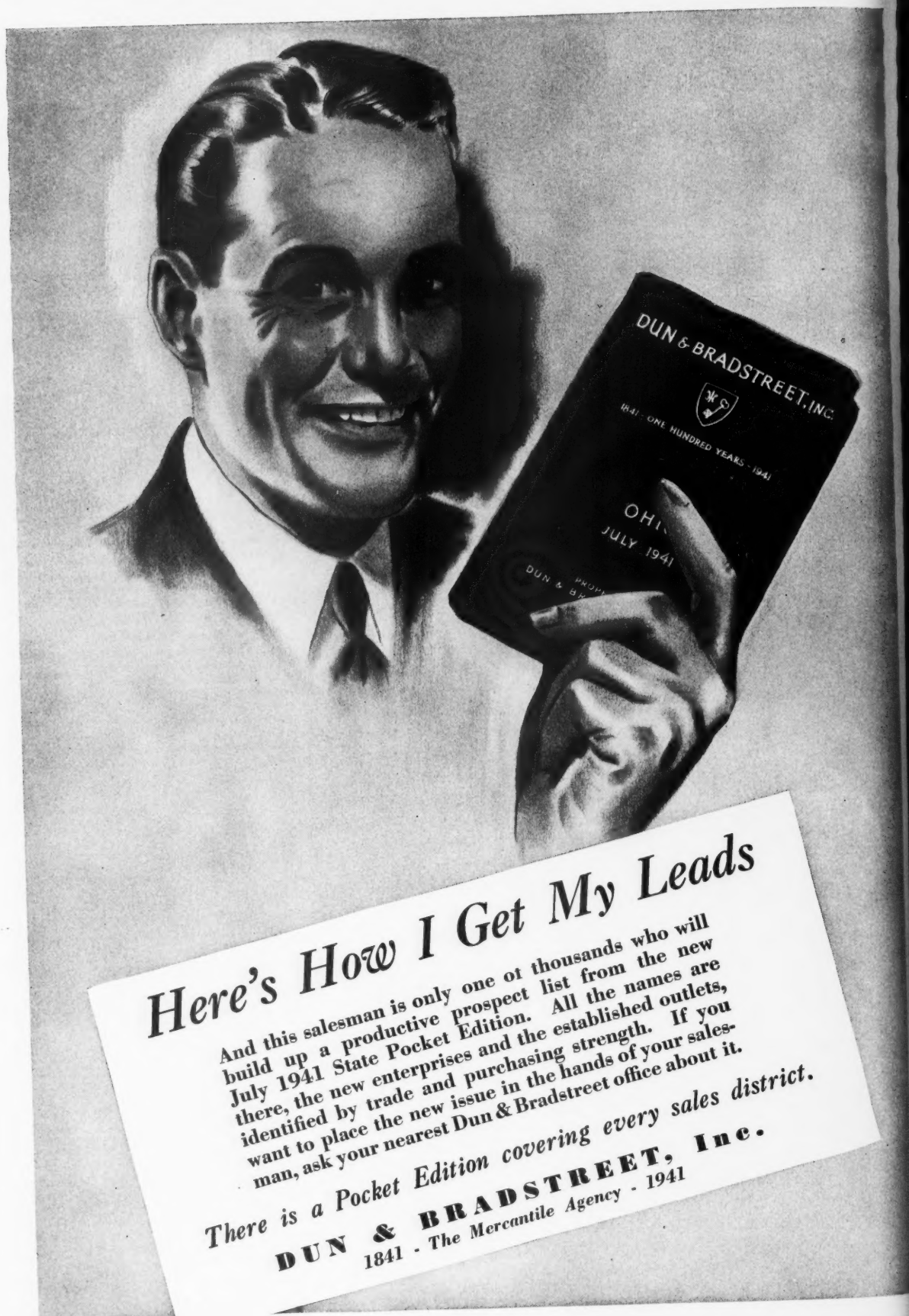
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